TEXT IS FLY & CROSS WITHIN THE BOOK

UNIVERSAL LIBRARY OU_158200 AWWINN AWWINN

	PAGE
அறுபதாம் ஆண்டு கிறைவு விழா கான் பாராட்டு By Vidwan T. Palaniappa Pillai	982
தமிழ் இசை வளர்ச்சித் தலேவர் By K. Ponniah Pillai	(83)
By R. Raghava Aiyangar	_986
சழ்த்த By Balakavi V. Ramanatha Chettiar	
By Pandithar L. P. K. Ramanathan Chettiar	
By Pandithar L. P. K. Ramanathan Chettiar	991
3 கட்டி காட்டரசர் சேர்த்தி By K. R. M. Ramaswamy Chetty	998
பாரஇயாளும் முனோப பெரி⊥ாரும் By S. Rudrapathiar	1004
ைந்த்துப்பா By Sivathiananandha Maharishi	1016
காழ்த்துப் பாட்டு By Rao Sahib V P Subramania Mudaliar	1018
பூத்சேல் By Vidwan G. Subramania Pillai	1019
வாழ்த்த By Vidwan G. Subramania Pillai	. 1001
தமிழ் தால் வளர்ச்சியும் ஆராப்ச்சியும். By Prof. K. Subrahmanya Pillas	1022
வாழ்த்தப்பா By K. S. Pillai	1031
Godinasdin sof By Mahamahopadhyaya Dr. V. Swaminatha Aiyar	1033
ஆஅசிர்க்கழி கெடியடி பாகிரிப் விருந்தம் By A. Varadananchaya Pillai	1036
மங்கை வாழ்த்து By E. S. Varadaraja Alyar	1040
e. Breut and அதிலேழுத்தையார். By T. A. Venkatachala Pillai	1042
arresa ji Silver By Navalar N. M. Venkatasami Nattar	1045
" LES 4 de Gravas " Ru R K Vienenathan	1053

xvi CONTENTS

		PAGE
श्री भण्णामळेनृपगुणस्तवः		
By C. Saraswathi Bai		1059
प्रशस्तिपत्रिका ॥		
Sanskrit Department (Annamalai University)		1063
मङ्गळाश्वसनरूपाणि पद्योपहारकुसुमानि ।		
By Pandit S. Ramasubba Sastri		1066
मङ्गळाशंसनपत्रिका		
By V. K. Seshadriacharya Siromani and Vidwan		1068
पद्यकुसुमाविळ:		
By K. Srinivasachari		1069
॥ संस्कृतविद्या राजानश्च ॥		
By V. Subrahmanya Sastri		1071
॥ धर्म भूतं ज्ञानम् ॥		
By V. K. Seshadriacharya Vidwan, Siromani		1076
दुनिया के कार्यरंग में स्त्रीयों का पात्र		
By Mrs. Padmasani Aravamuthachari		1082
Verses in Kannada	••	1089
ಶುಭಾಶಂಸನೆಯ ಪದ್ಮಗಳು		
By A. K. Puttaramu	••	1090
ಧನೈ ದಲ್ ಲಕ್ಷ್ಮಿ.		
By K. V. Puttappa	••	1093
ಮೆಟ್ಟುವ ನೆಲ ಕರ್ನಾಟಕ್ಕ		
By K. V. Puttappa	••	1094
Song		
By Sir Umar Ali Shah		1097
పంచరత్న ములు		
By Vidvan T. Appanna and Jampana Chandra Sekara	Rao .	1098
ఆశీస్పుమములు		
By G. Jashava		1101
త్రీరాజా. సర్. అన్నామలై చెట్టి భర్మబశంస	••	
By Venkataswami Gupta		1103
<u>-</u>	••	1100
్రపణయ పరిణామము Bu Jamana Chandan Galana B		
By Jampana Chandra Sekara Rao	• •	1109

CONTENTS

	xvii
മ ഗള ാഞ [®] ജലി	Page
By Kuttamath	1117
രഥബന്ധം	
By C. N. A. Ramayya Sastri	1119
തമിഴരും മലയാളികളും	
By P. Anantan Pillai നവയ്യാം	1121
By K. N. Gopala Pillai	
ത്രീ ഭഗവഭ ഗീത	1131
By T. K. Krishna Menon	
ധചനികാരൻെറ എതിർവാഭിക്ക	1137
By P. Krishnan Nair	
കവിത	1149
By K. K. Kurup	1155
കേരളവും സംഗീതവും	1100
By K. Parvathi Ammal	1167
ඟ ා ගුං හු ගුං	
By C. N. A. Ramayya Sastri	1175
Bu H H Rama Variant Annual Ma	
By H. H. Rama Varma Appan Thampuran തൃത്തമാടട്ടെ	1179
By Vallathol	
	1185

LIST OF ILLUSTRATIONS

The Rajah Saheb of Chettinad (Frontispiece)

- 1. The Rajah Sir S.Rm.M. Annamalai Chettiar
- 2. Father and Brothers
- 3. The Rajah Saheb and the Rani Saheba of Chettinad
- The Rajah Saheb of Chettinad in LL.D. Robes (Madras University)
- 5. The Rajah Saheb on his walk in the garden
- 6. Kumararajah Sir M. A. Muthiah Chettiar, B.A.
- 7. Kumararajah in Mayoral Robes
- Kumararajah M. A. Muthia Chettiar as Pro-Chancellor, Madras University
- S. Rm. M. Rm. Ramanathan Chettiar, Under-Sheriff, Madras
- M. A. Chidambaram Chettiar, 3rd son of the Rajah Saheb of Chettinad
- 11. The River View of the Palace at Adyar
- 12. The Rajah Saheb's Palace at Kanadukathan
- 13. Proposed Chettinad Palace at Chettinad
- 14. Proposed Chettinad Palace at Chettinad (Another View)
- 15. The Rajah Saheb's Rest House at the Chettinad Railway Station
- 16. The Rajah Saheb's Bungalow at Ootacamund
- 17. Aerodrome Building, Chettinad
- 18. The Rajah Saheb of Chettinad at the opening of the Chettinad Aerodrome
- 19. A Group Photo at the Chettinad Aerodrome
- 20. The Rajah Saheb at the Chettinad Aerodrome
- 21. Lady Pentland Women and Children Hospital, Chettinad
- 22. The Rajah Saheb of Chettinad
- Pro-Chancellor, Chancellor and Vice-Chancellor (in Academic Robes, 1931)
- H. E. Lord Erskine, G.C.S.I. (Chancellor, Annamalai University, 1934-39)
- H. E. The Hon'ble Sir Arthur Oswald James Hope, G.C.I.E., M.C., Chancellor, Annamalai University, from 1939

- 26. Diwan Bahadur S. E. Runganadhan M.A., I.E.S. (Retd.), Vice-Chancellor from 1929-1935
- The Right Hon'ble V. S. Srinivasa Sastriar, P.C., C.H.,
 LL.D., Vice-Chancellor from 1935-1940
- Rai Bahadur Sir Kurma Venkata Reddy Nayudu Garu, K.C.S.I., D.Litt., Vice-Chancellor, Annamalai University from 1940
- 29. Library and Administrative Buildings
- 30. Interior View of the Srinivasa Sastri Hall
- 31. Annamalai University Convocation, Rajah Sir Annamalai Chettiar presiding
- 32. Arts College
- 33. Arts College
- 34. Science College
- 35. Oriental College
- 36. Music College
- 37. Gokhale Hall-Union Hall
- 38. The All-India Economic Conference, 1934
- 39. Hostel
- 40. Women Students' Hostel
- 41. The Park and the Bandstand
- 42. Sports Pavilion
- 43. Guest House and Staff Club
- 44. Hospital
- 45. Posts and Telegraph's Office and Professors' Quarters
- 46. Ladies Club
- 47. Vice-Chancellor's Bungalow
- 48. Acting Vice-Chancellors
- 49. Sri Pasupatheswarar Temple—Annamalainagar
- Nagarathar reception to Rajah Sir Annamalai Chettiar at Koilur on April, 1930.

RAJAH SIR ANNAMALAI CHETTIAR OF CHETTINAD

A Memoir.

Rajah Sir Annamalai Chettiar was born at Kanadukathan on the 30th of September 1881. He was the third son of Muthiah Chettiar, a man distinguished for his practical piety and benevolence. Muthiah Chettiar was a greatly respected member of the Nagarathar community of which he was, in his day, the undisputed head. He was thoroughgoing in his benefactions. He renovated the temple of Sri Nataraja at Chidambaram at a cost of several lakhs of rupees and also established a choultry where pilgrims could find food and shelter. In the cold weather, at the time of the Arudhra Darsanam, the choultry is thick with pilgrims from all over the country and gets the appearance of a little town. He also repaired and renovated the famous shrine at Karur, which has since been in an excellent state of preservation.

Muthiah Chettiar's piety was profound. He undertook a pilgrimage to Benares and for half the distance he went on foot. While at Benares, at the desire of his community, he began the construction of the Nagarathar choultry a spacious and richly-endowed rest-house on the Dasaswamedha Ghat, where hundreds of pilgrims congregate everyday all the year round.

Muthiah Chettiar had three sons, Chidambaram, Ramaswami and Annamalai. Chidambaram Chettiar, a forceful personality, was the first among the Nagarathars to make roads in Chettinad. Cart-tracks and pathways began to give place to metalled roads over which one could pass in

comfort and safety. He had two sons, Sir M. C. T. Muthiah Chettiar, who attained considerable prominence in the social life of Madras and Pethachi Chettiar, who died comparatively early. This branch is represented now by Sir M. C. T. Muthiah Chettiar's son, the Hon'ble M. C. T. Chidambaram Chettiar.

Ramaswami Chettiar, the second son, was a man of great probity and public spirit. He was nominated to the Legislative Council constituted under the Morley-Minto Reforms and was the first member of his community to receive that distinction. He built and endowed a school at Chidambaram, which is now flourishing as the Ramaswami Chettiar High School. He was Chairman of the Chidambaram Municipality for many years and was President of the Taluk Board. For his many services, the distinction of Dewan Bahadur was conferred upon him.

Annamalai—the subject of this sketch—was the third son of Muthiah Chettiar and is said to have been his father's favourite, probably from being the youngest of his sons. His was a normal childhood and youth with little to distinguish them from those of his contemporaries. Probably a distaste for what was merely mamul and conventional and a more than ordinary propensity to get into mischief were the main features of his early youth.

Annamalai Chettiar's early years were years of preparation. His father was keen upon giving him a good upbringing. He personally supervised his studies and gave him a thorough grounding in the family business. From early in his career, Annamalai Chettiar, studied different systems of banking and, in time, came to be acknowledged as an expert in that field.



THE RAJAH SIR S.Rm.M. ANNAMALAI CHETTIAR

Muthiah Chettiar died when Annamalai was nineteen. After his death, his sons effected a partition of the family properties among themselves and began to conduct their several businesses separately. Chidambaram, the eldest and Annamalai, the youngest, stayed on at Kanadukathan while Ramaswami Chettiar chose Chidambaram for his residence and stayed there, more or less permanently, visiting Kanadukathan at intervals.

For about ten years Annamalai Chettiar devoted himself entirely to his business and family affairs. He was very careful in his choice of agents to conduct his firms abroad and he avoided the not uncommon mistake of leaving too much to them. System, regularity and attention to detail marked his way of doing business. With slackers he had no patience at any time and such was his driving power and force of example that his firms and businesses were run without a hitch.

The results of his methods were seen in the returns. His business prospered exceedingly. With fuller profits he decided to lead, not an easier, but a fuller life. The ancestral family house, big as a barn, was not exactly to his taste and he built himself a commodious house at Kanadukathan. It is a gracious edifice built in the conventional Nagarathar style but planned on liberal lines, with larger halls and ampler verandahs than is common in Chettinad. It is a house with character. In that palatial abode more than one Governor has been an honoured guest. Men of light and leading from all over the country have enjoyed the Rajah's princely hospitality within its halls.

Annamalai Chettiar toured extensively in India, Burma, Ceylon and Malaya. He was always fond of seeing "cities of men, manners and governments," and acquired

by personal study a remarkable degree of varied knowledge. In 1910, in company with his nephew, the late Sir M. C. T. Muthiah Chettiar, he toured over Europe. He was also accompanied by Mr. and Mrs. Miller of the American Mis-They were old friends of his and it was his appreciation of their devoted services that was largely responsible for his gifts to the American Mission. He spent many months in England and saw a good deal of the country. Annamalai Chettiar was deeply interested in local selfgovernment and took advantage of his stay in England to study the administration of parishes and county councils. To this tour, Annamalai Chettiar says he owes much. He was impressed by the efficiency of the day-to-day administration of affairs in the west, the highly-developed civic sense of the people and wondered why, in this respect modern India should not follow the example of the west.

On his return to India, he enlarged the sphere of his activities. He desired to give practical expression to his interest in local affairs and got a chance to do so when he became the Chairman of the Karaikudi Union. He did not regard his job as a sinecure; he took his responsibility seriously and, in his time, things began to hum. People still talk of the days—it was before the discovery of the internal combustion engine-when Annamalai Chettiar used to drive up to Karaikudi, all the way from Kanadukathan, in his landaulette drawn by a magnificent pair of iron-grey horses, go round the town, giving orders and seeing them carried out and return to Kanadukathan, while to the rest of the townfolk, the day was just beginning. Spacious days they were and, in his own heart, I feel certain Rajah Sir Annamalai Chettiar looks back with longing to the days of the streamlined landaulette, on which the most luxurious Daimler or Buick, he asserts, is not a patch.

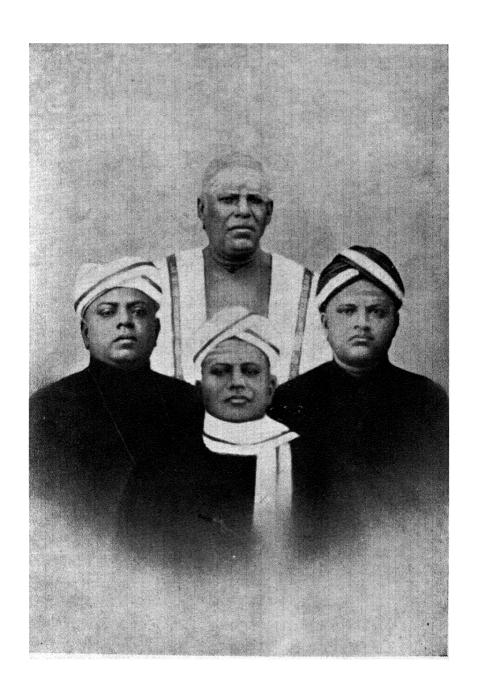
He was Chairman till 1913. His tenure of the Municipal Chair gave him a lot of insight into the problems of Municipal administration, the ways of men who will help and those who will hinder, and he learned at firsthand when wheels move and when they get stuck. He was also a member of the District Board and, in this capacity also, he bestowed careful attention to parochial problems. He was so great a believer in self help that he induced his native village of Kanadukathan to form itself into a voluntary union without waiting for the government to confer that status on it.

Annamalai Chettiar was ever ready to do everything in his power to serve the interests of law. On one occasion His Majesty's mails were waylaid and stolen. Information was sent to Annamalai Chettiar who, with a handful of men, scoured the country in person and finally succeeded in running the offenders to earth at an out-of-the way spot, just as they were in the process of dividing the 'swag'. At the sight of the 'intruders' they bolted, leaving the larger part of the loot behind. Annamalai Chettiar recovered the properties and duly forwarded them to the District Magistrate. The Police were soon on the tracks of the runaway robbers. Those were the days of highway robberies and dacoities and Annamalai Chettiar's pluck and determination came in for cordial appreciation. Here was another proof of his public spirit and soon afterwards he received the sanad and badge of Rao Bahadur. They say that "a good launch is half the voyage" and there can be no gainsaying the fact that Rao Bahadur Annamalai Chettiar made his launch into public life in a most favourable wind

In 1916, Rao Bahadur Annamalai Chettiar was nominated to the Madras Legislative Council, and from this time he divided his time between Chettinad and Madras.

From a very early period, Rao Bahadur Annamalai Chettiar was deeply interested in education. Education, he was convinced, was the prime need of this country and he made liberal contributions whenever possible. In 1915, he provided a hostel for the students of the American College at Madura, a gift which was greatly appreciated. The sister institution, known as the Madura College, was languishing for lack of funds. Rao Bahadur Annamalai Chettiar was approached for financial aid and he readily contributed about 30,000 rupees, being one half of the amount needed for acquiring a site for the location of the College. The other half was contributed by the Government.

The family had already to its credit the High School established by Dewan Bahadur Ramaswami Chettiar at Chidambaram. Rao Bahadur Annamalai Chettiar desired to extend the family benefactions so as to cover the field of higher education as well. His ambition was to build and endow a College. He consulted his old friend and colleague on the Legislative Council, The Right Hon'ble V. S. Srinivasa Sastriar who enthusiastically supported the idea. The two called in Mr. P. A. Subramania Aiyar, Headmaster of the Hindu High School, a veteran educationist, and took counsel together. They discussed details, ways and means. The idea grew and took shape in Annamalai Chettiar's mind. The question was where the proposed college should be located. At one time, Annamalai Chettiar thought of Madura but the rival claims of Chidambaram could not easily be brushed aside. He had not come to a decision



THE FATHER AND BROTHERS

when his brother, the Dewan Bahadur, died. It was patent that he would have to take some practical interest in the conduct of the High School and it struck him that the best plan under the circumstances would be to locate the College also at Chidambaram. Doubts were raised whether the South Arcot District was the most suitable area for the establishment of a college. It was said that the experience of the past was against it, as twice previously a College had been started at Cuddalore, but had been allowed to languish. Annamalai Chettiar was unconvinced. What were the reasons for the failure, he kept asking. In his own mind, he knew the answer. Lack of funds, a Micawber-like waiting on hope, and slackness in management should have been the reasons why the College did not take root. He thought over the matter deeply and came to the conclusion that Chidambaram was, on the whole, best suited for the purpose and decided in its favour. The reasons which weighed with him were, firstly, Chidambaram's historic and religious associations which qualified it to be the seat of a University, and secondly, the family's age-long connection with the town and its devotion to Sri Nataraja, under whose divine care and protection they had prospered in the past.

The idea once formed, there was no delay in carrying it out. With Rajah Sir Annamalai, to decide is to act. A staff of brilliant men was collected and the work was taken in hand. The College had started work by 1918. The absence of a suitable building was not allowed to stand in the way. Necessary extensions were made to the High school to accommodate the classes newly formed. At the same time plans for the building of a College were maturing. A suitable site was selected and the work of construction began in right earnest. Annamalai Chettiar threw himself

into the work heart and soul and spared no pains for the early completion of the project. He had expert assistance but he went over every inch of the ground himself. In purely academic matters, he trusted implicitly to his educational advisers. On the practical side, he held easy sway. In planning the buildings, in providing funds and seeing to their proper application, Rao Bahadur Annamalai Chettiar took the utmost interest. Not a stone was laid and not a rupee spent which had not met with his previous approval. Though the Rao Bahadur looked to most things in person, he took care not to get into people's way. His own views and suggestions were so sensible and practical that his advice was sought at every turn. On the academic side, he was ably assisted by Mr. K. A. Nilakanta Sastri, the first Principal of the Sri Minakshi College. In the work of construction he had the benefit of the willing assistance of such engineering experts like Dewan Bahadur A. V. Ramalinga Aiyar, Dewan Bahadur Duraisingam and Dewan Bahadur N. Swaminatha Aivar.

No suitable contractor was locally available. Materials had to be brought down from great distances but this was not allowed to deter or delay the work which had been undertaken. He worked hard, and his employees worked hard. The Rajah acts on the principle that the labourer is worthy of his hire. And the labourers in turn reacted so splendidly to the prevailing mood that work became a pleasure. The construction proceeded like clockwork and the new Sri Minakshi College was completed and fit for occupation in 1923.

While engaged in advancing the cause of higher education, Rao Bahadur Annamalai Chettiar had not been unmindful of his other obligations. In 1920, he stood for elec-

tion to the Council of State and was returned at the top of the polls. In the same year, the Viceroy appointed him one of the Governors of the Imperial Bank of India. In both of these capacities, he had increased opportunities of serving the country. His vast experience of banking made him extremely valuable on the Bank's Governing Board while, as an elder statesman, he expressed himself with moderation and good sense. To the Council of State he was elected thrice consecutively, and was always returned at the head of the polls.

To him honours were not slow in coming. In 1922, he was made Dewan Bahadur and in 1923, a knighthood was conferred upon him. Never were honours more deservedly bestowed. Apart from the record to his credit crowded with achievement, his courtesy and charm of manner had obtained for him a large and ever-increasing circle of friends belonging to all parties and spread all over the country.

The Sri Minakshi College was prospering. With the years, it grew in reputation and popularity. So good was its work and so high its standing in the educational world that Sir Annamalai conceived the idea of making it the nucleus of a University. He took counsel with his numerous friends, both academic and lay, and they welcomed and supported the idea. Lord Goschen, who was Governor of Madras, and whose interest in the Sri Minakshi College was keen and constant, gave the proposal his instant blessing. An Annamalai University Bill was drafted and was passed into law. And the University came into being in 1929.

The inauguration of the University was hailed with universal satisfaction in our province. Sir Annamalai, the Founder, is the Pro-Chancellor of the University. The Right Hon'ble V. S. Srinivasa Sastriar was appointed Vice-Chancellor but, because he had to go away as the Agent to the Governor General in South Africa, he could not take up the appointment. Dewan Bahadur S. E. Runganadhan was appointed Vice-Chancellor in 1929 and he held the office till 1935. Dewan Bahadur S. E. Runganadhan's unremitting care and attention helped to increase the usefulness of the University. He was succeeded by the Right Hon'ble V. S. Srinivasa Sastriar who was Vice-Chancellor for five years and by the distinction of his personality and his devoted work enhanced the status and reputation of the University. For reasons of health Mr. Sastriar had to resign in 1940, and Sir Kurma Venkata Reddi Garu, Ex-Governor of Madras, with a distinguished record of public service succeeded him as Vice-Chancellor.

Annamalainagar, as the University area is called, is a lovely creation. Beautifully designed colleges and halls, comfortable quarters for the staff, broad and shady parks, a magnificent cricket pitch and spacious playing grounds make it an ideal spot for the dissemination of education. The place is packed with all the amenities of life. Rowing facilities, clubs for men and women, temples and tanks give the University its distinctive charm. Sanskrit, Tamil and Music stand out prominently in the University courses, a matter of deep significance from the cultural point of view. Students from the Tamil country flock to it in thousands and receive the education which is so readily imparted in ideal surroundings. And they are deeply appreciative of the bounty of the founder who saw the "seed of learning" imbedded within the young and enabled "its flowered future" to unroll. The Founder's Day is a sort of minor annual carnival at Annamalainagar.



THE RAJAH SAHEB AND THE RANI SAHEBA OF CHETTINAD

In 1929, the high and unique distinction of a hereditary Rajah was conferred upon Sir Annamalai Chettiar. magnificent thrill of delight went through the country. The Nagarathars were overjoyed and organised what was a regular carnival to express their joy. The celebrations were held at Kovilur, the traditional meeting-place of the ninetysix villages of Chettinad. Thousands of fairy lamps, gleaming in the evening in the streets, gay with bunting and greenery, turned the sleepy little township into a veritable fairyland. The Right Hon'ble V. S. Srinivasa Sastriar presided on the occasion. His close friendship with Rajah Sir Annamalai Chettiar and the mutual regard which was known to subsist between them pointed to him as the person most fitted to take the chair. Numerous friends of the Rajah, representing all communities and all shades of opinion. were present. In a magnificent speech, The Right Hon'ble V. S. Srinivasa Sastriar showed how eminently the Rajah was fitted for the regal rank bestowed on him.

The University of Madras marked their appreciation of the Rajah's services to education by conferring on him the degree of Doctor of Laws.

In 1935, Rajah Sir Annamalai visited England at the head of a delegation whose purpose was to obtain the necessary safeguards in regard to the position of Indians in a separated Burma. The Rajah Sahib interviewed the Secretary of State, Sir Samuel Hoare, Mr. R. A. Butler, Lord Winterton and other leading members of Parliament. It was, on the whole, a successful trip and valuable concessions were obtained. Separation, however, has forced into prominence other outstanding matters all of which Rajah Sir Annamalai Chettiar handles with his accustomed energy and determination. The Indo-Burma Immigration Agreement

which has been exercising the public mind considerably, is engaging his attention at the moment.

From England, the Rajah paid a flying visit to the United States of America. He was accompanied by Rani Lady Annamalai Chettiar and both of them appeared to have enjoyed the visit greatly. Their only regret was that they had to return very quickly to keep their various engagements in Great Britain. While in England, the Rajah visited the Universities of Oxford and Cambridge. In Oxford, he met the Master of Balliol who showed him over the University. He discussed problems of University Administration with, it was said, "considerable insight." He also visited the several slum areas as he is keenly interested in the housing conditions of the poor. His visits were not intended to fill a dull hour; he was serious and purposeful in making them, he was "like a chiel, takin notes". Sir Annamalai had the knack of turning all his experiences to practical account. He personally designs the quarters which he provides for his numerous employees and dependants, and these are invariably airy and comfortable.

Before returning to India, Sir Annamalai visited Belgium, France and Germany. In Paris he was able to do a real good turn to his country. The Government of French Indo-China were beginning to look upon Indians with disfavour and had actually expelled some of them. Sir Annamalai took the matter up with the French Government. The India Office put him on to the British Embassy in Paris, who arranged a meeting with M. Rollin, the Minister for Colonies. M. Rollin recognised the force of Sir Annamalai's contentions and promised to remedy the situation, which he did without loss of time. In this connection the Rajah remembers with gratitude the help

willingly given among others by M. Outrey, an exceedingly genial and helpful member of the Chamber of Deputies, and M. Eugene Simoneau, a cultivated and charming young Frenchman, employed as Secretary to M. Rollin and who has since joined the administration at Morocco as a member of the Cabinet of General Nogues.

If the Rajah has a hobby, it is building. It may be said of him that he has given much and built much. In England, and all over the Continent, he studied novel building designs with a practised eye. His houses are models of elegance and comfort. His home at Chettinad is commodious, well-lighted and airy and Chettinad House at Adyar is a lovely piece of architecture. With the Adyar on one side and the sea on the other, in a spacious park, it stands, a fabric in white, which looks like fairy gossamer at dawn in a December mist. The Palace which he is now engaged in building at Chettinad is certain to surpass similar edifices in grandeur and comfort.

And in hall, grange and park, Rajah Sir Annamalai loves to dispense hospitality. His visiting list is long and his geniality and princely hospitality have won all hearts. He is lucky in his heipmate. Rani Lady Annamalai Chettiar is an ideal wife, and has won all hearts by her piety and charitable disposition.

In his house at Chettinad he has been honoured by the visits of successive Governors of the Province. Lord Pentland stayed with him in 1916 and was struck by the Rajah's standing in his District.

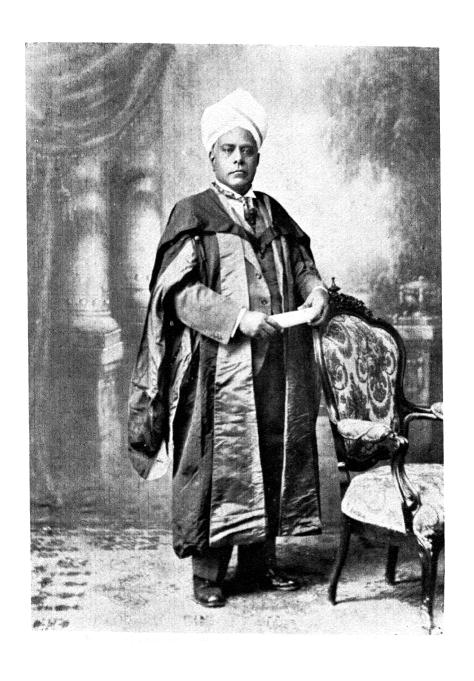
In 1932, Lord and Lady Willingdon visited Chettinad and greatly enjoyed their stay at his house. Lord Goschen was his guest in 1925. The Stanleys spent a day with him in

1934 and recently in March last, the Rajah had the honour of entertaining His Excellency Sir Arthur Hope at Chettinad. Rajah Sir Annamalai's services to his community have been marked by careful attention to their interests here and abroad. He has been the President of the Nattukkottai Nagarathars' Association for many years and has secured for the Association valuable rights and privileges.

Rajah Sir Annamalai Chettiar's paramount claim to public esteem lies in the abundant charities which he has founded. Apart from the University which is the biggest endowment ever made by a single individual in these parts and by all accounts one of the first four or five leading endowments in all India, he has given large sums for schools, hospitals and similar benefactions. It is a safe estimate that his numerous benefactions have, so far cost the Rajah over a crore of rupees—a truly magnificent record indeed.

One may safely prophesy that the future of the family and the family charities is assured. Rajah Sir Annamalai Chettiar's sons are sure to carry on the family tradition. His eldest son Kumararajah Sir M. A. Muthiah Chettiar has already distinguished himself in the public life of the Presidency by his great gifts or organization, and leadership. As Mayor of Madras, as a Minister of State, as the leader of the Justice Party and as a businessman he has won laurels. The Rajah's younger sons, Mr. Ramanathan Chettiar and Chidambaram Chettiar are in business. The former is also Deputy Sheriff of Madras.

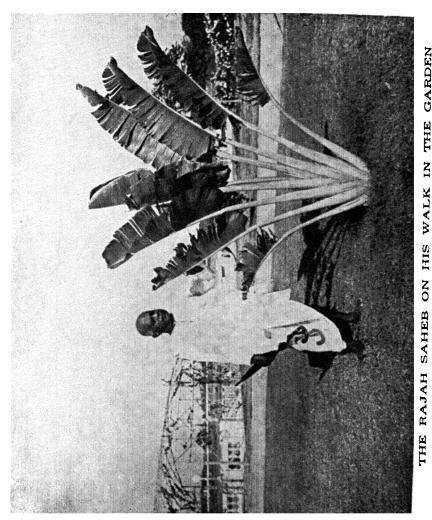
In his own personal habits the Rajah is extremely simple. He adheres resolutely to the Tamil maxim which exhorts one to rise before the dawn. He is generally up at four in the morning, has a bath and has an early cup of coffee. He



THE RAJAH SAHEB OF CHETTINAD IN LL.D. ROBES (MADRAS UNIVERSITY)

is at his desk by six and by about ten contrives to get through the bulk of the day's work. He walks about a great deal and is happiest when sauntering on his grounds directing a path to be made here or a tree to be planted there. Of music he is passionately fond, and often, while at work, he turns on the wireless to listen to his favourities. He has taken in hand the resuscitation of Tamil music and it is the prayer of his numerous friends that he should live long to enjoy the sweet strains he is doing so much to revive.

GREETII	NGS,	GOOD	WISHES	S AND	APPREC	CIATIONS.



THE RAJAH SAHEB ON HIS WALK IN THE GARDEN

HIS EXCELLENCY SIR ARTHUR HOPE, G.C.I.E., M.C., Governor of Madras

I am very pleased to hear that the University is celebrating in a fitting manner the Shastipurti of Rajah Sir Annamalai Chettiar, and to add my own warm congratulations. The Rajah's munificence has been widespread, but it is above all for his magnificent contribution to the cause of education in South India by the founding of Annamalai University that his name will be remembered among future generations with affection and respect.

HIS HOLINESS KASIVASI SWAMINATHA THAMBIRAN AVL., Tirupanandal

As a philanthropist, Dr. Rajah Sir Annamalai Chettiar stands foremost in South India. The munificent gifts that he has made for the cause of education, medical aid, and women welfare all over India and elsewhere, not to speak of his other charities, distinguish him as the most generous hearted gentleman of the present generation. In particular, the University at Chidambaram founded by him with departments of Science, Tamil, Sanskrit and Music, the first residential teaching University in South India, is a boon to the rising generation. The University town has sprung, as if by magic, into a centre beaming with intelligent faces and pursuing academic work of a high order. That part of the town in which the University is situated has been fittingly named after the Founder, having been converted from a dry waste into a model town with all modern amenities. Thus the University with its colony stands to the credit of Dr. Rajah Sir Annamalai Chettiar as a monument of his educational munificence. We heartily congratulate him on the happy function of the celebration of the completion of his 60th year and wish him long life and prosperity.

DR. GEORGE S. ARUNDALE, President, Theosophical Society

It is with very great pleasure that I add my congratulations to all those with which I am sure Rajah Sir Annamalai Chettiar will be inundated on the occasion of his Shashtiabdapurti—a notable spiritual event in his life and the herald, I am sure, of that added fineness of stature with which the new period will bless him.

The Rajah Saheb has been in the public eye almost from the beginning of his career, and it was not long before he entered the public service in the Councils of this Presidency and of India. Indeed, this very year marks the twenty-fifth anniversary of his association with the Madras Legislative Council, while on each occasion that he stood for election to the Council of State he was returned at the top of the poll, thus receiving a notable token of the esteem in which he has always been held both by the general public and by his own community. His Majesty the King-Emperor has fittingly recognised the outstanding worth of Sir Annamalai by conferring upon him honour after honour, and worthily have these been worn.

As a business man he has achieved success which few even among his peers have reached, largely because his benefactions have always increased as his worldly prosperity has grown. But the crown of them all has been the great Annamalai University at Chidambaram—a veritable monument to his public spirited patriotism and kingly generosity. Most rightly did the Rajah Saheb say in 1926, a few years before the actual establishment of the University:

Since days long past, Chidambaram has been a great centre of culture in South India and has enlisted the devotion alike of her warriors and kings, philosophers and poets. It has often struck me that at Chidambaram, if anywhere in South India, there is a great opportunity for working on chosen lines and to noble ends that synthesis of the great cultures of the East and the West which is the prime task of our country and of her educational institutions at this hour.

Chidambaram is indeed a sacred spot fragrant with the splendour of noble lives and with the dedication of mighty saints, and there could be no better setting for the education of India's young citizens in the true spirit of their Motherland.

Rajah Sir Annamalai Chettiar has thus sought to make available to these modern days of India's life the very soul of India's spiritual greatness that her young sons and daughters of to-day may be greatly inspired to build a future worthy of her incomparable past.

Surely the blessings of Bharata Mata must be upon him for this signal act of filial homage to her and will gladden his way as he passes this sixtieth landmark of his present incarnation.

May he be spared many years to continue his great services to India and to this Presidency.

MR. T. AUSTIN, C.I.E., I.C.S., Adviser, Government of Madras

I gladly add my best wishes to the commemoration volume which is to mark the completion of Rajah Sir Annamalai Chettiar's sixtieth year. The list of his benefactions is long and varied: in the great generosity shown towards



KUMARARAJAH SIR M. A MUTHIAH CHETTIAR. B A

educational institutions and the welfare of women, he has taken the direction where help is so much needed. I wish the Rajah Sahib many more years of useful life.

REV. FATHER P. CARTY, S.J.

The 61st birthday celebration of Dr. Rajah Sir Annamalai Chettiar of Chettinad appeals to me not only as the worthy public recognition of the truly royal munificence of one of India's most distinguished sons and benefactors, but also as an event of national importance, occurring as it does at the very time when the world suffers, as it has rarely suffered before, from the inhuman machinations of ruthless malefactors. This horrifying background of fierce war and bloodshed involving in its destruction peaceful and harmless citizens even more than the armed forces, sets out by contrast, as nothing else would, this admirable life of peaceful endeavour so generously and so unassumingly spent in the one object of doing good and being good to others and making people happy.

The benefactions of Dr. Rajah Sir Annamalai have become a household word not only in South India but in the North and in Burmah as well; and what, to my mind, makes their chief value is the high purpose which we discover behind each one of them. They are either charitable endowments seeking to relieve the misery of the poor, or religious endowments which clearly indicate his high spiritual motives and reveal that sense of service to man for God's sake which is so different from mere humanitarianism;—or, lastly, but not the least, educational endowments which he has spread so lavishly throughout the length and breadth of India and Burmah. If I stress this last proof of his genuinely gener-

ous and kindly heart it is because by his munificent largesses in this field he has shown the high value he sets on the promotion of education and learning in India. In this he is perfectly right, since obviously a nation of illiterates is bound to lag behind in every form of improvement and progress. And though India cannot certainly be called an illiterate country when we consider the quality and the numbers of those of India's sons who, in the field of learning and science, can proudly stand any comparison with those of other countries, nevertheless the hundreds of millions who still await their chance of receiving even a fairly adequate elementary education, reveal perhaps one of the chief factors which account for the slow march of all-round progress in India. For it is by the brains of its citizens that a nation ultimately develops and prospers.

It is the peculiar merit of Dr. Rajah Sir Annamalai to have keenly realized this fundamental need of India and to have come forward to meet it on so magnificent a scale. It is, moreover, a peculiar trait of his enlightened generosity that by the crowning foundation of the Annamalai University he has opened up new vistas of higher learning and efficiency to many a poor student who, but for this institution and the free scholarships with which it is endowed, would have been unable to rise from their humble surroundings and to take place among the builders of India's future.

I feel deeply honoured to have been invited to associate myself with the many admirers of Dr. Rajah Sir Annamalai in expressing in however imperfect a manner, my personal esteem, respect and admiration for him on this auspicious celebration.

THE MAHARAJAH OF COCHIN

On the occasion of the Ṣaṣtyabda-poorti of Dr. Rajah Sir Annamalai Chettiar of Chettinad, I have great pleasure in wishing him many more years of happy and useful life.

My son was a student of the University of which Rajah Sir Annamalai Chettiar is the founder, and the glowing accounts he has given me of the University will ever remain fresh in my memory.

KULAPATHI DR. J. H. COUSINS.

Art Adviser to the Government of Travancore; Head of the Department of Fine Arts, University of Travancore

I have watched the career of the Honourable the Rajah of Chettinad, with deep appreciation of the princely manner in which he put the material results of his genius in the affairs of the outer life into the creation of a great institution for the development of the powers of the inner life of the young men and women of South India. I have also been much gratified by his continued fostering of the Annamalai University, and trust that the institution will have the benefit of his guidance for many fruitful years to come.

THE HON'BLE SIR MANECKJI B. DADHABHOY, K.C.S.I., Barrister-at-Law, President, Council of State

I am very glad to state that I had come in close contact with my friend Dr. Rajah Sir Annamalai Chettiar of Chettinad for many years in our capacity as members of the Council of State, and I had always entertained very high opinion of his business ability and his noble and spotless character. He was well respected by all the members of the Council of

State and his debates in that House were full of information, sober thought and sound judgment. His business capacity is very much respected in the town and Presidency of Madras. He is an ornament of his community and I pray that he will be spared for many years to render good and substantial services to his country which for many years he has so faithfully discharged.

PROFESSOR B. B. DEY, D.Sc. (LONDON), F.I.C., I.E.S., Presidency College, Madras.

The foundation of the Annamalai University the first real residential University in the South, through the vision and munificence of one single individual, is unique in the annals of education in this Presidency, and the beneficial work of the University with its high standard of efficiency is slowly becoming known throughout the country.

My close association with the University even from its inception, and particularly with the Chemistry department which has been built up so efficiently by my friend Dr. S. N. Chakravarthi has made me familiar with the work of the Science Departments and particularly with the research activities in Chemistry and in Physics, which would do honour to any of the old Universities in this country.

I send my best wishes for success of the celebrations of the event.

LORD ERSKINE, G.C.I.E., M.P., Ex-Governor of Madras.

I send my best wishes to the Rajah of Chettinad on the occasion of his sixtieth birthday. The Annamalai



KUMARARAJAH IN MAYORAL ROBES

University will remain a lasting symbol of his love for learning and culture. The Tamil country should ever be grateful to Sir Annamalai as one of the leading educational benefactors of South India. May he be with us for many more years.

PROFESSOR J. FRANCO, M.A., Presidency College, Madras

It is extremely pleasing to me to render my tribute on the occasion of the celebration of the Shashtiabdapurthi (61st birthday), of the Rajah Saheb of Chettinad for the invaluable services he has rendered to the cause of higher education in this country.

Apart from the traditional and free-handed generosity for which his family has been noted, his own benefactions for the relief of suffering, the uplift of the poor, the renovation of our ancient temples and the promotion of indigenous culture have been immense. Besides, one cannot but be struck with his pioneer achievement in a new and most fruitful direction, namely, the starting on a magnificient scale, of the first Unitary Residential University in South India. This is but the beginning of the realisation of the idea of establishing Residential rather than merely Examining, Universities, at the principal centres of culture, within the jurisdiction of the overgrown University of Madras and the Rajah Saheb deserves to be congratulated on taking the first step in this direction.

It was on the sub-structure of the Sri Minakshi College at Chidambaram which the Rajah had started in 1920 and which had developed into a vigorous and popular Honours College, that the Annamalai University was founded. It not only embodies the idea of a University of the Residential type but also serves as a centre in which the genius of Tamil culture can be fostered. For over two decades the Rajah has assiduously watered and anxiously watched the tender plant that had been set in the soil of hallowed Chidambaram. The sapling has now become a big and leafy tree spreading its foliage over a number of branches of learning, one of which we may note with pride, is South Indian Music and another the department devoted to the revival of Tamil Literature and Culture.

The Rajah Saheb's many-sided philanthropy has thus reached its acme in the Annamalai University. This will perhaps be the most serviceable and enduring of all his charities. It is, my sincere prayer that he may be long spared to us to see his work thrive and prosper and if possible, to render yet other valuable services to South India.

MAHATMA GANDHI

"I would wish the Rajah Saheb many a long year of useful service."

MR. V. V. GIRI, BAR-AT-LAW

It is but right and fitting that the Annamalai University is celebrating in a fitting manner the 60th year of its great founder Rajah Sir Annamalai Chettiar. His many sided charities are well-known throughout India and have earned the esteem of his fellow countrymen. My esteemed father the late Mr. V. V. Jogiah Pantulu, and myself have known the Rajah Saheb for nearly two decades and we always appreciated his services to the country. His sacrifice

for establishing the University will ever be remembered. I wish the Rajah Sahib long life, happiness and prosperity to continue his great work of putting the University on a sound basis.

THE HON'BLE SIR MAURICE GWYER, K.C.B., K.C.S.I., Chief Justice of India and Vice-Chancellor, Delhi University

The princely benefactions of Rajah Sir Annamalai Chettiar of Chettinad are known over the whole of India, and it is difficult to say which we have admired the more, the magnificence of his gifts or the breadth of his sympathies, for no good cause has ever appealed to him in vain. Education owes him an inestimable debt, not only for what he himself has done, great though that is, but for the noble example which he has set to others.

It is not given to many men at their Shashtiabdapurthi to look back on a life so full of liberality and beneficence; and all those who labour in the field of education will join in offering their most hearty congratulations to the Rajah Saheb upon this anniversary and their earnest prayers that he may live to enjoy many more years of happiness and welldoing.

MR. A. A. HAYLES, Editor. Madras Mail.

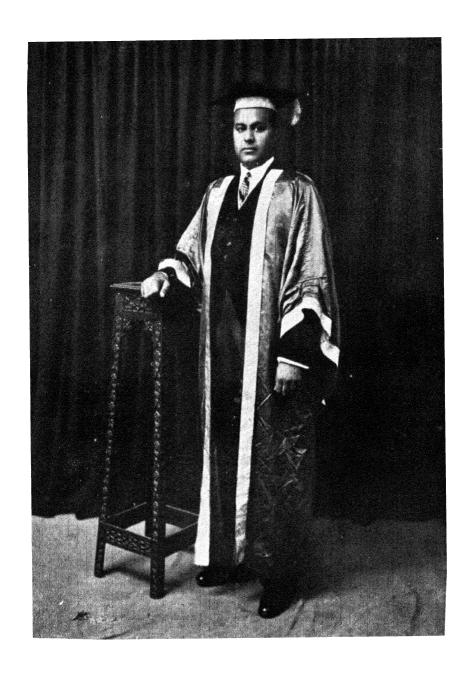
Nearly a hundred years divide Annamalai Chettiar from Pachaiyappa, but it is significant that the century which opened with the founding of a school and college by one great South Indian should have closed with the establishment by another of a university. Rajah Sir Annamalai Chettiar will be best remembered for the university which bears his name, but that only partially represents his benevolence. From the temples he has built or renovated and endowed for the benefit of his fellow religionists to the hospitals and other public institutions, big or small, that he has supported his charity has flowed into many channels, helping those less favourably circumstanced than himself.

A genial, wise and uncommonly shrewd personality, Rajah Sir Annamalai Chettiar has made friends in many places and in different walks of life. They join his colleagues and fellow-workers in wishing him continued happiness and prosperity.

THE HON'BLE KHAN BAHADUR SIR MD. AZIZUL HUQUE, C.J.E., B.L., M.L.A.,

Vice-Chancellor, Calcutta University

On the happy day when the Hon'ble The Rajah of Chettinad, the Pro-Chancellor of the Annamalai University completes his sixtieth year I recall the great service which he has rendered to the cause of education and social welfare of the people of the province of Madras. The Annamalai University stands most pre-eminently as the monument of his great work. He has given a new incentive to the cultural life of the people of the Annamalai area and I am sure that a time will come when under the auspices of the University, Annamalai will stand second to none in the cultural progress of India. The Rajah has been closely associated with many aspects of public life and the people all over India must always feel gratitude for all that he has done for the people of this country.



KUMARARAJAH M A MUTHIAH CHETTIAR AS PRO-CHANCELLOR. MADRAS UNIVERSITY

THE RT. HON'BLE SIR AKBAR HYDARI, KT., P.C. LL.D. D.C.L., President, H.E.H. The Nizam's Executive Council

I have had the privilege of knowing Dr. Rajah Sir Annamalai Chettiar for a number of years and of being aware of the great charities dispensed by him for public benefit and utility, the most monumental endowment being the Annamalai University itself which derives its name from its most generous donor. The example set by this great philanthropist is one which may well be copied by others who have the good fortune of possessing wealth and the spirit and the heart to use it for the benefit of mankind.

AMIN-UL-MULK SIR MIRZA M. ISMAIL, K.C.I.E., O.B.E.

It is with genuine pleasure that I avail myself of this opportunity to convey my hearty felicitations to Rajah Sir Annamalai Chettiar on the completion of his sixtieth year, and to wish him many years of happiness and usefulness to his fellow-citizens.

Sir Annamalai Chettiar's record as a philanthropist is one of which any man may be proud. As the Founder of the Annamalai University, his name will ever be remembered. That University will stand for all time as the noblest record of his munificence and his public spirit.

A most obliging friend, a generous host, a successful business man, Sir Annamalai is a most prominent and popular figure in the social and commercial life of this Province.

Let me wish him once more every good fortune in the years to come.

SIR FREDERICK JAMES, M.L.A.

I count it a privilege to send a message for the Commemoration Volume to be presented to Dr. Rajah Sir Annamalai Chettiar of Chettinad on his 61st birthday.

Few men acquire great riches; fewer still use those riches for the common weal. The Rajah has done both. He must indeed be a happy man when he contemplates the many monuments of his generosity—and particularly the spectacle of that University which was founded and endowed by him, and so fittingly perpetuates his name.

Titles have rightly been bestowed upon the Rajah; but I have no doubt that on this day his heart will be warmed, not by their decorative dignity but by the gratitude and affection of all classes in his and succeeding generations.

When I wish him many happy returns of his birthday anniversary, it is not the usual formal greeting. It expresses the sincere wish of one of his many friends that he may long be spared to continue his charitable activities and to share, with his family, the satisfaction and reward of years of distinguished public service.

SIR COWASJI JEHANGIR

In any part of the world to find a man who devotes his wealth to discriminating charities, bringing great institutions into existence for the benefit of his fellow subjects, is rare. Such a man is Dr. Rajah Sir Annamalai Chettiar, whom the whole of India in general, and the Madras Province in particular, will congratulate on his 61st birthday. He will ever be remembered in his Province as the Founder of a great University and as a great patron of Art and Learning.

Young men of the Province of Madras will for generations be grateful to the man who helped to educate them. May all the educational institutions founded by him help to produce Indians who will be an honour to their country.

It is a pleasure to know the Rajah Saheb personally, a most unassuming man who, having amassed a fortune, delights in helping those who are not so fortunate as himself. May he continue to add to the good works that have distinguished his whole career.

THE HON'BLE SIR BARON JAYATILAKA Minister for Home Affairs & Leader of the State Council, Ceylon

I have been invited to associate myself with the celebrations which the Annamalai University proposes to hold in connection with the sixty-first birthday of Sir Annamalai Chettiar, the Founder and Pro-Chancellor of the University. I respond with sincere pleasure, and send this brief message in order to express my high appreciation of the great services Sir Annamalai Chettiar has rendered to his country, notably in the sphere of education.

Last December it was my good fortune to visit the Annamalai University and see for myself the magnificent work that is being done in that unique institution. During that visit I had also the opportunity of gaining some idea of the generous liberality with which Sir Annamalai is maintaining religious and charitable institutions in that part of the country.

"Dātā jagati durlabhah" (a giver is rare in this world) is an ancient and true saying. Sir Annamalai Chettiar has by his munificence earned the right to be enrolled among

those rare beings who spend their wealth nobly for the welfare of humanity.

MR. T. J. KEDAR, B.A., LL.B., M.L.A., Vice-Chancellor, Nagpur University

It is with the greatest pleasure that I associate myself in the celebration of the Diamond Jubilee of the Founder Pro-Chancellor of the Annamalai University.

Unique among the educational benefactions in Modern India, the princely donation of the Hon'ble Rajah Dr. Sir S. R. M. Annamalai Chettiar of Chettinad laid the foundation of a new teaching University in India. And it has been given to him, as it has been given to few, to nurse and bring up the most favourite child of his own charity and to set it going on the path of progress under his paternal guidance.

May the noble Rajah live a hundred years and may his great example inspire others and bear thousandfold fruit!

DIWAN BAHADUR R. V. KRISHNA AYYAR, C.I.E., Additional Secretary to the Government of Madras, Public Department

I am glad that the Annamalai University is intending to celebrate the Sashtiabdhapoorthi of its Founder-Pro-Chancellor. It is very meet that it should do so. The attainment of the Sixtieth year is an auspicious event in the life of every Hindu; but in the case of the Rajah of Chettinad, who has dedicated such a substantial part of his wealth as he has done for the benefit of the Annamalai



S Rm M Rm RAMANATHAN CHEITIAR, UNDER-SHERIFF, MADRAG

University, the event is one for national celebration and jubilation.

The name of the Rajah of Chettinad will be prominent in the roll of the honoured names of great Kings, Noblemen and others who have encouraged learning and Arts. In one sense, his work is greater than that of many of them, as he has not been content merely with patronising one or more individual poets or musicians, but has created a whole University with its many-sided activities which in course of time would bring forth a whole host of poets, philosophers, economists, scientists, musicians and leaders of men.

The Rajah of Chettinad is an example of what is expected of rich and wealthy men in these days. Though the inheritor of a vast fortune, he is one who has not been content to sit idle and enjoy himself, but his life has been a great example of active work. diligence and devotion to duty.

Even as regards this University, but for his perseverence and resolve, it would not have come into being. After its coming into existence, the constant care and attention he has been bestowing on its welfare and progress are truly remarkable.

His original endowments and gifts to the University which are already fabulous have constantly been added to, every time when the University was in need of help.

But the University is no longer the Rajah's property but is a national institution specially intended for the benefit of the Tamil land. It is the duty of all of us to see that the institution does not languish for want of support and that it becomes truly and in effect a magnificent Temple of Learning for the whole of the Tamil land. Chidambaram is situated in the heart of the Tamil country. It is known in our ancient books as the centre of the Universe. It has hoary traditions of learning; but the glory of the ancient traditions of this town will, I hope, be nothing as compared with the glory which ought to be its future.

Being a Residential University, it has special facilities to enable the students to learn the greatest of all Arts, and so far as India is concerned, also the most difficult of all Arts, namely, the art of living together. It can not only help in the creation of a cultured and intelligent society, but to build up a fraternity which will replace the strife of classes by social peace.

Now that an Andhra University has come into existence for the Andhradesa, a Travancore University for the Malayalam speaking peoples, a Mysore University for the Kannada-speaking people, this University must be treated by the Tamilians as the embodiment of their aspirations and the realisation of their unity.

It is the prayer of every citizen in this Province that the Raja of Chettinad will be spared to us for many many years to come and that he and his children and children's children will be happy and prosperous from generation to generation.

SIR ALLADI KRISHNASWAMI AYYAR, B.A., B.L., Advocate General, Madras

I rejoice in the opportunity that you have so kindly afforded me to send my most cordial and affectionate greetings to Dr. Rajah Sir Annamalai Chettiar, the Founder and Pro-Chancellor of the University on his 61st

birthday. The event represents according to our Hindu notions a significant mile-stone in one's life and it is singularly appropriate that the University which he founded and has been nursing with such devotion should organise the celebration with felicite' and goodwill.

The Annamalai University is by far the most outstanding contribution to the cause of University education by any private benefactor in this part of India. To the Rajah of Chettinad belongs the credit of giving a new direction to the well-known philanthropy and the public spiritedness of the Nattukottai Chettiar community. Not content with founding the University the Rajah has been taking a sustained living and parental interest in the work of the University and has added largely to the original foundation by the institution of new scholarships and studentships.

It is not warrow significance that the University is located in the heart of the Tamil country sanctified by the shrine of Lord Sri Nataraja, "The Kovil" of Saivite Literature. At Chidambaram Patanjali and Vyagrapadha performed their great tapas and Nandanar in later times attained his beatitude. I have no doubt that Sanskrit and Tamil culture will radiate from this University and that votaries of science and humanities will gather within its walls and spread knowledge to the different parts of India.

It is my fervent hope and prayer that the Rajah may be long spared in health and happiness to be of service to the country and to the cause of education, that the institution which he has founded and nursed may grow from strength to strength and that from its walls may go forth men and women filled with the sense of the text of the great Upanishad.

. ओं असतो मा सद्गमय । तमसो मा ज्योतिर्गमय । मृत्योर्मामृतं गमय ॥

Om. From the unreal lead me to the Real.

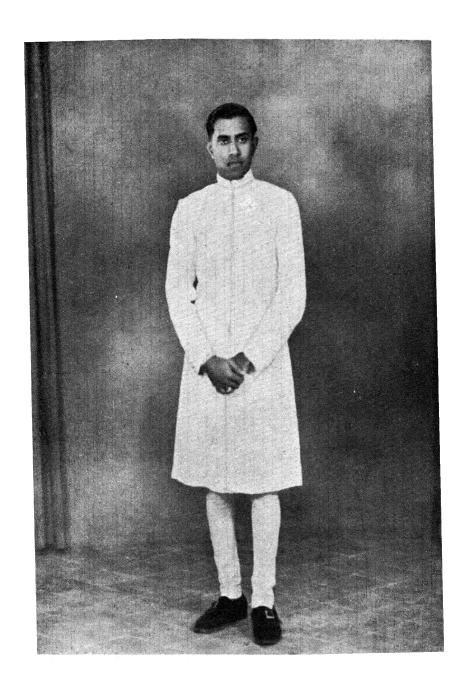
From darkness lead me to Light.

From death lead me to Immortality.

MR. V. N. KUDUVA, M.A., I.C.S., Collector, South Arcot,

For generations, Nagarathars have been well-known for their charities. The temples renovated and endowed by them are innumerable, and they are by no means confined to the Tamil Nad. A healthily conservative community, their charities, while they are extensive, had till recently a tendency to run in time-honoured and traditional grooves. It was given to the Rajah Sir Annamalai Chettiar of Chettinad the auspicious occasion of whose sixtyfirst birthday, has evoked expressions of gratitude from his countrymen, to strike a new channel of philanthropy by devoting a considerable portion of his wealth to the creation of a new University which perpetuates his name.

Chidambaram is singularly fortunate to have attracted the attention of the Rajah Sahib's family and to have been the recipient of their benefactions. For over three generations, members of his family have spent a fortune in the stupendous task of renovation of the great Sabhanayaka shrine including the rebuilding of the gopurams, mantapams, and fine-pillared corridors of the inner enclosures of the Sri Nataraja Temple, a shrine which was for over fifteen



M A. CHIDAMBARAM CHETTIAR, 3RD SON OF THE RAJAH SAHEB OF CHETTINAD

great centre of South Indian culture. centuries a which attracted the devotion of the Chola Kings and a large number of saints, philosophers and poets who have left an indelible mark and shaped the culture of the Tamil people. The action of the Rajah Sahib in completely and effectively renovating the dilapidated shrine of Sri Govindaraja is characteristic of his catholicity of mind in view of the age-long disputes between the followers of the Vaishnavite and Saivite faiths which had marred the harmony of the great shrine. Chidambaram has also to be specially grateful to the Rajah Sahib's elder brother, the late Dewan Bahadur Ramaswami Chettiar, for its two great amenities, a flourishing High School which provides for the education of its youth, and its protected water-supply which has to a large extent minimised the ravages of cholera and filaria.

The nucleus of the University, Sri Minakshi College was founded by the Rajah Sahib in 1920, and by rapid and successive stages, it has been developed into a University of a unitary teaching and residential type which is unique in South India. The purpose and aims of this University in the words of the Rajah Sahib are "to embody and work for the synthesis of the great cultures of the East and the West which is the prime task of our country and her educational institutions at this hour." Provision has been made for research, and a unique feature of this University is a well-endowed faculty of oriental studies including a school for the training of the youth in the art of Carnatic and Tamil music.

The University is still in the stage of development, and it is essential for its development as a residential University that its authorities should endeavour to promote the social and corporate life of its students in a healthy manner. One of the objects of its Founder Pro-Chancellor is to satisfy,

after the inauguration of the Mysore and Andhra Universities, the desire of the people of the Tamil Nad to have a University of their own. It is therefore natural that education should be imparted in a manner to promote the highest ethical and cultural wealth of the Tamil race. It is hoped that this University will build up a healthy and noble tradition and give scope for the full expression of the Tamil genius without restricting it to the barriers of provincialism.

THE HON'BLE SIR LIONEL LEACH, Chief Justice of the Madras High Court

The Sixtieth anniversary of the birth of Dr. Rajah Sir Annamalai Chettiar or Chettinad, the rounder and Pro-Chancellor of the Annamalai University provides a fitting opportunity for the members of the University to acknowledge the deep debt of gratitude which they owe to him. The debt is not, however, confined to the members of the University. It is a debt which all in South India owe. The public benefactions of Dr. Rajah Sir Annamalai Chettiar have been many, but the greatest benefaction of all has been the foundation of the Annamalai University. It is impossible to conceive of a more useful object to which wealth could be devoted in times of peace.

It may not be possible to express adequately in words the gratitude which is felt for the magnificent public spirit which the Founder has shown, but the feeling of gratitude is there and all will join in offering him their sincere congratulations on this happy occasion and in the prayer that he be granted many more years of life to watch and aid the development of the University which he has founded. THE HON'BLE NAWAB MAHDI YAR JUNG BAHADUR, M.A., (OXON),
Vice-Chancellor, Osmania University and Educational Member,
Hyderabad, Deccan.

The foundation and munificent endowment of the great Annamalai University by its Founder Pro-Chancellor, the Hon'ble Rajah of Chettinad, has marked him as a true benefactor of his country. The University will be a perennial fountain of learning, to which the youth of India will come in great numbers and drink deep of the springs for generations to come. On this the 60th Anniversary of the birthday of the Founder, thousands of his grateful countrymen join in paying him a tribute of admiration for his pious and selfless act of which the Annamalai University is an enduring monument.

MR. R. P. MASANI, M.A., Vice-Chancellor, University of Bombay

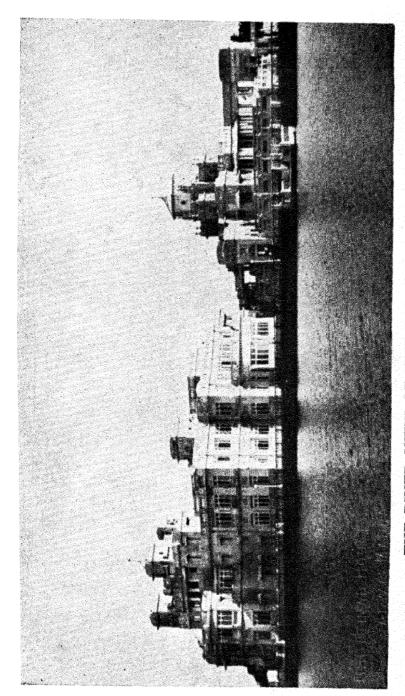
I am very glad to hear that it is proposed by your University to celebrate the completion of 60 years of the life of the Hon'ble the Rajah of Chettinad, Founder Pro-Chancellor of the Annamalai University, and that as a part of the celebrations it is proposed to present a Commemoration Volume to the Rajah Saheb on the 28th September 1941. You are thereby honouring one who has taken a very keen interest in the promotion of higher education and rendered it possible by his munificent donation to found a residential university. I have much pleasure in sending to your University, and through you to the Rajah Saheb also, my cordial greetings and best wishes.

SIR CHUNILAL V. MEHTA, K.C.S.I., Bombay

I consider it a privilege to be asked to send a message to be incorporated in the Commemoration Volume that it is proposed to present to Dr. Rajah Sir Annamalai Chettiar of Chettinad on his completing his Sixtieth year. It is a happy thought on this occasion to recognise the many extremely valuable services that Dr. Rajah Sir Annamalai has rendered to the Southern Presidency, to the cause of Education and to Hindu Religion, and its Shastras. charities have been on a princely scale and have been both catholic and enlightened. The founding of the splendid University in Annamalainagar both Teaching and Residential will be a lasting monument to the public spirit and generosity of Dr. Rajah Sir Annamalai Chettiar and of his distinguished family, as lasting as the famous temples of Chidambaram which he has renovated at great cost. That Dr. Rajah Sir Annamalai Chettiar will be long spared to continue his useful public services and his generous charities for many years to come must be the fervent hope of every friend and well-wisher of his.

THE REV. JOHN K. MILLER, M.A., D.D., White Lodge, Coonoor, The Nilgiris, S. India

It is with real pleasure that I add my tribute and hearty congratulations to Dr. Rajah Sir Annamalai Chettiar of Chettinad, whose friendship I have enjoyed for more than thirty years, on having completed sixty years of life so satisfactorily for himself and others.



THE RIVER VIEW OF THE PALACE AT ADYAR

To few has it been given and made possible to do so much for others as he has done and I hope he may live for many more years to do even greater service for humanity.

In 1910 it was my privilege to help in preparing him and his nephew the late Sir M. C. T. Muthiah Chettiar, for a visit to Europe and to the coronation of our late good King George the Fifth and to accompany them on the voyage and trip through Europe.

This visit I am sure did much in awaking these gentlemen to a realisation of India's needs to their own ability to help meet them and our Madras Presidency has benefited greatly from their gifts and public service.

In 1913 a gift from the then Rao Bahadur Annamalai Chettiar made possible a hostel for our Pasumalai Normal Training School and a few years later he gave a generous donation towards our fund for the installing of our water and Electric lighting plant and he has since given to other good causes at Pasumalai.

It was also the privilege of Mrs. Miller and myself to assist him in entertaining at his Chettinad home three of our Madras Presidency Governors, beginning with H. E. The Right Honourable Lord Pentland and on these occasions to see the laying of foundation stones for numerous schools and hospitals in Chettinad.

I have watched with interest the work of Dr. Rajah Sir Annamalai and of his children, who are following in his steps and finding ample opportunity for service of mankind.

With every good wish for a long and happy life for himself and family I subscribe myself as one who is his true and loyal friend.

SIR B. L. MITTER, Kt., K.C.S.I., M.A., B.L., BAR-AT-LAW, Advocate General of India,

Possession of wealth may be a blessing or a curse. In India material wealth has never been given the dominant value which it possesses in western civilization. Here the value is measured by the use made of it. The place of the owner of wealth in society is conditioned by the extent to which he regards his ownership as a trust. Rajah Sir Annamalai has always acted up to the Indian ideal and, hence, the high estimation in which he is held by his countrymen. He has used his great wealth for the spread of education, relief of distress and other acts of charity. I recall an occasion when I appealed to him for help to Lady Irwin Girls' School at Simla and Delhi. He said little, but, in about an hour's time, I received from him a cheque in five figures. The amount so generously given formed the nucleus of a building fund. The school now possesses a magnificent building and it is one of the foremost educational institutions in New Delhi for the benefit of Indian girls of all provinces and all communities. I have known Rajah Sir Annamalai for many years and I know how completely he is inspired by the Indian ideal of the union of Lakshmi and Saraswati. I offer my hearty felicitations on his completing his sixtieth year.

DR. MARIA MONTESSORI

I have heard of the great efforts of the Hon'ble Rajah Sir Annamalai Chettiar has made in favour of education in this country. Myself, as a pioneer of education and as the opener of a new field of discoveries, am deeply moved by those who open the possibilities to human beings of

obtaining the development which should be due to every human spirit. To him, therefore, I convey my congratulations on the attainment of his Sixtieth Birthday. I hope that his life may last long and that his figure may long remain an example to the rest and a living monument of those who have deserved well from India and from the rest of humanity.

REV. L. D. MURPHY, S.J., Principal, Loyola College, Madras

It gives me great pleasure to have this opportunity of adding my voice to the general chorus of congratulations to Rajah Sir S. R. M. Annamalai Chettiar. It is easy without exaggeration to speak in terms of high praise of the Rajah's manysided character, with its lotus-like development against a background of utter simplicity of life. Success sits lightly on his shoulders and the black care which the poet Horace foretells for such eminence as the Rajah has attained can never be his familiar. Its approach would be denied by the royal spirit of lavish generosity which has been so constant a companion in all his undertakings. Religion, Education and the poor are his special beneficiaries and together they form a strong buckler to protect him from harm. May God grant him many years of useful life for their benefit.

MR. S. MUHAMMAD HUSAYN NAINAR, M.A., LL.B., (ALIGARH), Ph.D. (LONDON), University of Madras

Dr. Rajah Sir Annamalai Chettiar of Chettinad, in whose honour this volume is issued on the occasion of his

sixtieth birthday is known throughout India and Greater India as the founder of the Annamalai University and also a number of charitable institutions. The Tamilnad, in particular, can never forget this magnificent and liberal patron of learning who has made Chidambaram a centre of light and leading. Although there are several munificent men in this great country, the Rajah Sahib, is, I think, the first person to specially pay attention to the promotion of learning on modern lines by founding a University which is named after him.

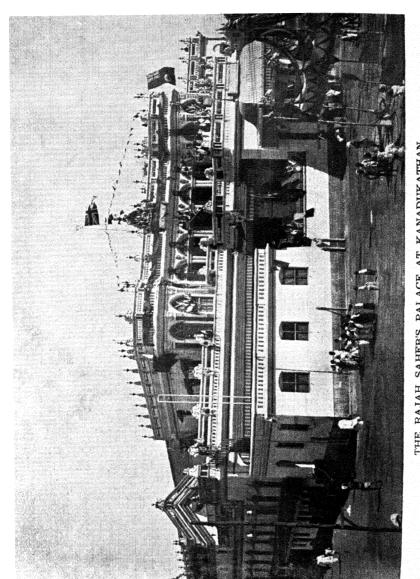
The Rajah Sahib has shown a rare devotion to Dravidian languages and culture. At a critical time in the history of the Tamil language he has come to its rescue. He has endowed special prizes for the study of Tamil and has thus inaugurated a new era of Tamil learning.

The Rajah Sahib's beneficence is so great that many towns and cities derive advantage from his charity. His charities stand out as a brilliant example of what a single individual with his own unaided resources can achieve. He is imbued with a spirit of such great self-sacrifice as is rarely met with in a man.

South India may well feel proud that it has produced such a noteworthy person who has done so much to quicken the intellectual life of this part of India. May he live long and continue to provide facilities for the development of culture and enlightenment.

PROFESSOR K. A. NILAKANTA SASTRI, M.A., University of Madras

I was for some time closely associated with some of the numerous benefactions which have made the Rajah's name a



THE RAJAH SAHEB'S PALACE AT KANADUKATHAN

household word in South India; and I had many opportunities of observing and admiring his great qualities of industry, clearness of mind, far-sightedness and, most important of all, promptness in well-doing. I have the pleasantest recollections of my association with the Rajah Sahib who in building up a great educational institution conceived policy on large and generous lines and gave his Principal and staff the widest academic and administrative freedom in carrying it out.

I wish him many years of life full of happiness to himself and his family and of service to the country.

MR. H. C. PAPWORTH, M.A., 1.E.S., O.B.E., Principal, Presidency College, Madras

I greatly appreciate the invitation to write a short tribute on the occasion of the sixtieth birthday of Rajah Sir Annamalai Chettiar of Chettinad, Founder and Pro-Chancellor of Annamalai University. I do so with special pleasure, as it has been my privilege to be a member of Annamalai University from its foundation.

Many colleges in English universities and many universities in America owe their foundation to private benefactors. In some cases these foundations assumed and still retain the name of the benefactor as their title; in other cases, especially in some of the older foundations, the original name has given place to another dedication. In India the Rajah Saheb of Chettinad has the honour of being a pioneer in this munificent work, for it was his bounty placed at the disposal of the State which made possible the foundation of the University which bears his name.

All educationists and all who prize the inestimable benefits of knowledge and sound learning will remember his munificence with gratitude, and offer him their felicitations at the ensuing commemoration of his birthday.

THE RAJAH OF PARLAKIMEDI

It gives me profound pleasure to offer my hearty congratulations to Dr. Rajah Sir Annamalai Chettiar of Chettinad on the occasion of his Sashtipurthi, the completion of a period of life unique with abundant feelings of philanthropy and rare aptitude for the creation of colossal charities like the Annamalai University. May God spare him for many more years with blessings of prosperity and healthy life to do further useful service to our great country INDIA and her people.

THE MAHARAJAH OF PITHAPURAM

I have known my dear friend the Rajah of Chettinad for a very long time. A gentleman of charming manners, he makes his visitors feel quite at home from the outset. It is indeed a pleasure to converse with him. His hospitality is proverbial. Possessing business talents of an extraordinarily high order he works hard day and night. That he should work so assiduously, though endowed by Providence with immense wealth, is truly praiseworthy. This is a quality worth acquiring, as it enables one to spend more money for charitable purposes. His manifold philanthropic activities cover a very wide and varied field. He thus sets a noble example. The most outstanding of his charities is,

of course, the famous Annamalai University. He has been rendering meritorious services to the country. Many are the poor that are benefited by the munificence of this generous Rajah. Most heartily do I congratulate my esteemed friend on this auspicious occasion of his "Shastipurti". May God grant him long life, happiness and prosperity!

KUNWAR SIR JAGADISH PRASAD, K.C.S.I., C.I.E., O.B.E., LL.D.

Dr. Rajah Sir Annamalai Chettiar of Chettinad is one of those rare men in India who have used their riches for the benefit of their fellow men. He is the founder of the only Unitary, Teaching and Residential University in South India, the Annamalai University of Annamalainagar. Other educational, charitable, religious and social institutions have benefited largely from his open-hearted generosity.

It is right and proper that his countrymen should do him honour not only as a munificent benefactor of learning but as setting a worthy example to others of the right use of great wealth.

I join with others in wishing him many more years of beneficent service to his province and country.

H. H. THE RAJAH OF PUDUKOTTAI

On such an occasion as the 61st Birthday of one who has so notably benefited Tamilnad as Rajah Sir Annamalai Chettiar, it gives me great pleasure—as Ruler-to-be of the only Tamil State—to send a message to the Vice-Chancellor of the splendid University which Sir Annamalai's generous munificence brought into being.

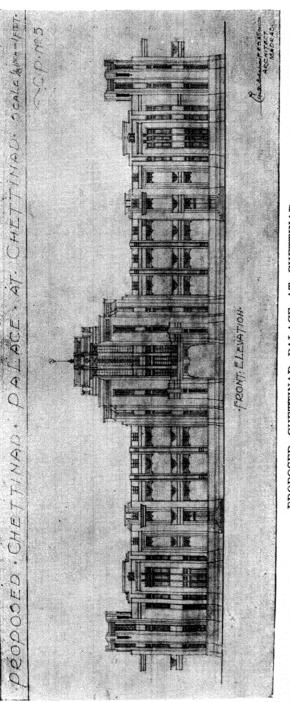
Many a Pudukkottian already has reason to bless the name of the Rajah Saheb and his now famous institution, and doubtless thousands more will do so. So it is in their name as well as my own that I send my sincere wishes for the continued prosperity and happiness both of the Founder and of his foundation.

SIR S. RADHAKRISHNAN, M.A., D.LITT., LL.D., F.B.A., Vice-Chancellor, Benares Hindu University

I am glad to know that your Pro-Chancellor the Hon'ble Rajah Sir Annamalai Chettiar, Rajah of Chettinad, will be completing his Sixty years on the 28th of September, 1941. The only University in the country founded by a single individual is yours. And for years it has been doing very valuable work. I have no doubt that the Rajah Saheb will continue to take an affectionate interest in the institution. I wish him many years of useful and happy life.

MIRZA MD. RAFI Barrister-at-Law, Rangoon

I beg to send from Burma a message of congratulation to Dr. Rajah Sir Annamalai Chettiar on his completing the 60th year of his life. The Rajah's name is remembered with respect in this country where many educational institutions have benefited by his gifts. In India his charities have been simply colossal. The Annamalai University alone, which constitutes a landmark in the history of education in South India, will for ever remain a monument to his kingly generosity, his love of culture, his ardent desire for the spread of education, more enduring than any commemorative present



PROPOSED CHETTINAD PALACE AT CHETTINAD

that we may offer him. We are not all born for great things, but let us not deny ourselves the greatness of appreciating things that are great. May the Rajah live long will be the prayer of all his friends and admirers among whom I count myself, on this happy occasion.

MR. C. RAJAGOPALACHARI, B.A. B.L., Ex-Chief Minister, Madras

I appreciate the courtesy that prompted you to send me intimation of the Sashtipurti celebration of Sir Annamalai. My son forwarded me your letter. To the numerous messages and greetings that will surely grace the pages of the Commemoration Volume, let me add a sincere tribute from one of his own generation, whom wide-gaping differences in political creed and practice have not prevented from appreciating the outstanding ability and virtues of the Rajah. But for the unfortunate abnormality of our national status and the struggles imposed on us, who can doubt but Sir Annamalai Chettiar would have been to all of us one of the safest and most successful leaders in our public life? I first met him twenty-two years ago when I was in the fever of the newly-discovered creed of Non-Co-operation and I remember how deeply I was impressed by the manner in which he took my answer to his request for a vote in the Council of State elections. That impression has continued unmodified by anything that has happened since then. In him we can see one who knows by instinct how to move among men of differing views, how to be big and powerful vet preserve untarnished one's courtesy and humility of mind and speech, how to be a gentleman in the difficult sense of the term. I join his other friends in congratulating him on the jubilee day and send up the wish and prayer

that all his virtues may flourish in the younger men that wait to reach his age, round about him in Chettinad.

RAO BAHADUR M. C. RAJAH, M.L.A.

I am glad the Diamond Jubilee of Rajah Sir Annamalai Chettiar is to be celebrated in a worthy manner. merely because he is a Rajah or a Knight but because he is a great man who is also a good man. Greatness and goodness do not always go together. There are many great men, men who make a great impression on the public mind, but in whom goodness is not very conspicuous—goodness of heart, goodness of disposition, a desire to do good to others and to find their own happiness in the happiness of others. It is the presence of these moral qualities in a man who has immense means and opportunities of doing good which distinguishes Rajah Sir Annamalai Chettiar from other rich men. not enough to own riches: what makes riches a blessing is to know how to use it for the good of others. This knowledge Rajah Sir Annamalai Chettiar possesses in an abundant I remember how before making an endowment quantity. which constitutes the foundation of the Annamalai University he consulted more than one Educationist, Indian and European, and discussed details with them so that the money he invested might prove most beneficial-might bear fruit, tenfold, thirtyfold and a hundredfold. It is this painstaking thoughtfulness, so characteristic of the man, which endears him to all who know him. There is so much self-forgetful dignity about the man that his benefactions seem a natural expression of his inner disposition, and are acceptable as such. We have all heard the saying "Noblesse oblige." Nobility has its obligations and responsibilities.

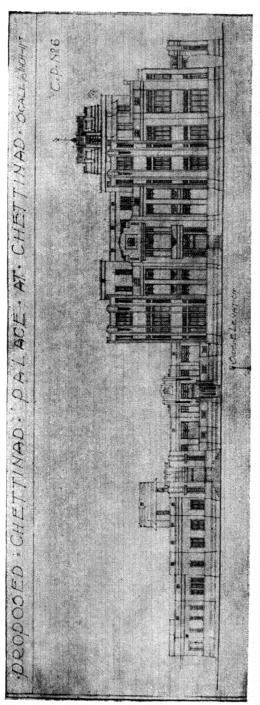
applicable not only to mere titular nobility but also to wealth and influence which when properly used make a man truly noble. Rajah Sir Annamalai Chettiar takes his rank with Tata, the founder of the Tata family who earned money through business but used that money for the benefit of his people and his country. In establishing the Annamalai University, Rajah Sir Annamalai Chettiar has given an impetus to the progress of education in Tamil Nad which will continue for endless generations. In this stream of educational progress we of the Depressed Classes will be caught up and carried to new realms of happiness and prosperity for which we shall ever remember Sir Annamalai Chettiar as a real benefactor of our community.

I have compared Sir Annamalai Chettiar to Tata. Perhaps a more appropriate and closer analogy and nearer home is to be found in Pachaiappa the founder of Pachaiappa Charities. This gentleman also earned and amassed a large amount of wealth, and endowed it all for the good of the people as religious benefactions, in the shape of free feeding and temple worship. These benefactions only fed the priests and did not bring any return of lasting good to the people at large. Certain wise men, however, of a later generation realised the comparative fruitfulness and barrenness of these charities, and rescued a portion of the funds for the purpose of educating the people. Thus we have the Pachaiappa Schools in Madras, Conjeevaram, Chidambaram and other places, and among these Pachaiappa's College stands as a prominent monument of his charitable disposition.

But Sir Annamalai Chettiar did not require the wisdom of a later generation to direct his benefactions. He has had not only the heart to give but also the head to direct his gifts into fruitful channels so that they may irrigate the homes and happiness of thousands of people in the country. The application of charities to Educational Institutions is like introducing electric lighting and electric power into a District.

Sir Annamalai Chettiar's community was always noted for making large benefactions but these had for generations taken the form of building temples and choultries and feeding pilgrims on festival occasions. And it was only in recent times that some of them under the influence of enlightened public opinion added the starting and financing of schools to the list of their benefactions while still the chief item of their charitable dispositions was in the direction of religious endowments. In Sir Annamalai Chettiar's own family some younger members endowed local schools which are conducted in their names. But it was given to Sir Annamalai Chettiar to conceive a larger project which will cover the needs of the whole presidency and benefit generation after generation and become part and parcel of the intellectual moral and spiritual legacy of this presidency. His is not a one-sided endowment intended to benefit one community rather than another. In keeping with the spirit of the times and needs of the country the doors of the Annamalai University are thrown open to students of all communities; and on its staff and council are men belonging to Brahmin, Non-Brahmin Hindu, Christian and Mohammedan communities. This is in keeping with the largeness of heart and the breadth of vision of its founder.

It is not without significance that the University is in a holy city, sacred to the memory of the Panchama Saint Nandanar. To me this circumstance is an augury of the



PROPOSED CHETTINAD PALACE AT CHETTINAD (ANOTHER VIEW)

bright future which awaits my community. Sir Annamalai Chettiar's name will go down in history associated with the moral, social and intellectual progress of the community of which Saint Nandanar was the Prophet and shining star.

SIR SHRI RAM, New Delhi

A handsome tribute was once paid to Baron Rothschild that needy Jews sometimes prayed to God but more often wrote to the Rothschilds. The tribute will apply better to Rajah Sir Annamalai Chettiar, as no deserving social cause has ever appealed to him in vain. His munificent charities to religious and educational institutions have been instrumental in reviving our great cultural heritage as represented in Sanskrit and Tamil philosophical works, in music and in other arts. He is a true Rajah, one who has endeared himself with the public as the prince of givers. The many beneficent institutions which he has founded in India, Burma and Ceylon are standing monuments of his philanthropy and of his desire to serve his fellow-men. May the Rajah Saheb be spared long to continue his elevating activities, is a prayer which will be echoed by thousands of his countrymen.

SIR C. V. RAMAN, KT., F.R.S., M.A., Ph.D., Hon. D.Sc., Hon. LL.D., Nobel Laureate, Indian Institute of Science, Bangalore

A unique place in the esteem and affection of his countrymen has been established for himself by Dr. Rajah Sir Annamalai Chettiar by his unparalleled services to the cause of learning, culture and religion in Southern India for

over a quarter of a century. Generations yet unborn will have cause to feel grateful to him for the opportunities he has created for the acquisition of the knowledge, alike of the East and of the West, by the youth of Tamilnad. He has saved for posterity the highest traditions of our language and our music and ensured their permanence by transmission from teacher to the taught in the institutions created by his princely benefactions. In the Annamalai University, he has established a centre of learning of a distinctive kind whose achievements have justly been a cause of pride to his countrymen and which will keep his name and fame green for all time. We rejoice that he has reached the sixtieth year of his age in full enjoyment of his health and strength. We pray that he may long be spared to continue his life of generous solicitude for the welfare of the younger generation and for the promotion of the cause of learning and culture in our country!

MR. E. V. RAMASAMI NAICKER, Erode

I am delighted to learn that the completion of the 60th year of Dr. Rajah Sir Annamalai Chettiar is going to be celebrated shortly.

The Rajah Saheb is a brilliant Gem of Tamil Nad. He is a Karma Veerar. Men of such keen intelligence, untiring energy and profound ability are very rarely found in this land. In his capacity for earning money and in his large-heartedness in utilising it for the welfare of humanity he stands unequalled in this Province.

It is a well-known fact that his charities are manysided and innumerable and thousands are benefited by them. In short, this Great Vallal has has given about one crore of rupees for charitable purposes. To-day, there is no equal to him in Southern India in munificence and philanthropy. It is but proper that the completion of the 60th year of this great benefactor should be celebrated in a fitting manner.

On this happy occasion, I have great pleasure in wishing him long life, sound health, great fame and prosperity.

SACHIVOTTAMA SIR C. P. RAMASWAMI AIYAR, K.C.I.E., K.C.S.I., LL.D.,

Dewan of Travancore

It is but appropriate and fitting that the Annamalai University should celebrate the Snashtiandapurti of its founder, the Hon'ble Rajah Sir Annamalai Chettiar.

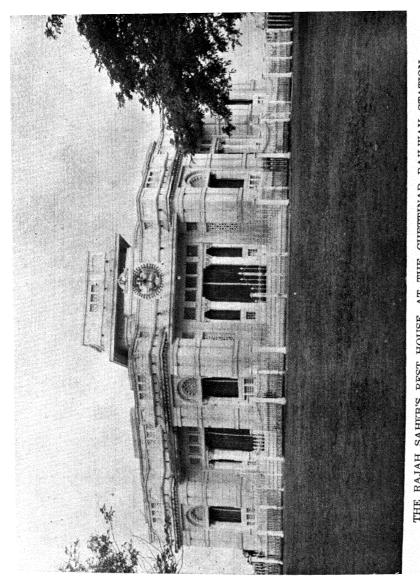
The community of which he is the most famous representative has been noted for centuries for its businesslike habits, frugality and simplicity of living and equally noted for the benefactions made by the Nagarathars from out of the wealth that they have amassed by the exercise of these qualities. Until quite recently, the community concentrated on the performance of various functions in South Indian temples; and their zeal for the renovation of temple buildings is a well-known feature. It was left to Rajah Sir Annamalai Chettiar to conceive the idea of starting a teaching and residential University in one of the most sacred and holy spots in South India. To the genius loci has been added the inspiration and stimulus of men like the Rt. Hon'ble V. S. Srinivasa Sastri who was, for some time, the Vice-Chancellor and who has been succeeded by my old friend Sir K. V. Reddy. The University can do a great deal not only in the matter of general studies but for maintaining and cherishing those great and ancient traditions of which

South India is so proud, namely, those of Sanskritic lore and Dravidian scholarship. As a nucleus of Sanskrit and Tamil learning and scholarship, the Annamalai University has a definite rôle to fill.

I join the University in wishing Rajah Sir Annamalai Chettiar many more years of beneficent activity.

THE HON'BLE SIR A. RAMASWAMI MUDALIAR, Commerce Member, Government of India

I am glad to learn that the public of the Madras Presidency have decided to celebrate the Shashtiabdhapurthi the occasion of completing the sixtieth year by Dr. Rajah Sir Annamalai Chettiar—in a suitable manner and that, in particular, the Annamalai University is bringing out a Commemoration Volume which will be presented to the Rajah Saheb. I have had the privilege of knowing Sir Annamalai Chettiar for nearly a quarter of a century and of being fairly intimately acquainted with his numerous activities in the field of politics, education and religion. No one has done more in the Province than the Rajah in finding funds for the promotion of higher education, religious education and the fine arts. Temples, schools, colleges and other charitable institutions have equally benefited by his large hearted donations. A side of his activities which may not have attracted equally prominent attention is the help he has given to the promotion of the cause of women. The main Ladies' Club in Madras and several similar institutions in the mofussil owe not a little to his magnificent donations. These princely charities of Dr. Rajah Sir Annamalai Chettiar will be a standing monument to the nobility, characteristic of his family and of himself in particular. It is needless to add that not by his charities alone but by his innate gentlemanliness



THE RAJAH SAHEB'S REST HOUSE AT THE CHETTINAD RAILWAY STATION

and sweetness of disposition that Rajah Sir Annamalai has endeared himself to every one who has had the privilege of knowing him. May the blessings of Providence be vouchsafed unto him and may he be spared for many decades to continue his great work and to be an asset to the community!

THE RAJAH OF RAMNAD

I am glad to know that you are proposing through an influential Committee celebrating the completion by Dr. Rajah Sir Annamalai Chettiar of Chettinad, of his sixtieth year on the 28th of September, 1941 in a fitting manner.

I thank you very much for the honour you have done in asking me to send a message of appreciation of his noble acts of piety, charity and great munificence, on this happy occasion. I am sure one more competent than myself will be better able to pay tribute to his various acts of charity and benevolence which are wide and varied.

His one ambition in life seems to be to strive, save and serve for the benefit of his fellowmen which is well exemplified by the charitable and educational institutions of great help and usefulness to humanity. His benefactions are varied and many but the highest monument of his beneficent works is the founding, equipping and endowing of the great and unique Residential University at Annamalainagar, more fittingly named after him.

I am sure his great name will ever be cherished with esteem and gratitude by posterity.

May God bless him with a further long life of continued prosperity to be of still greater service to humanity.

DEWAN BAHADUR C. S. RATNASABAPATHI MUDALIAR,

It is indeed a kindly thought that should have prompted the University authorities to celebrate the Founder's Day, that will recall to the memory of one and all, the munificent benefaction of my esteemed friend and our illustrious countryman, Rajah Sir Annamalai Chettiar. And this year's function has a special significance in that it happens to be his 61st birthday Sashtiabdapurti year. The Rajah belongs to a rare order typifying in himself, the aristocracy of Brain, Heart and Bullion in happy harmony. True to the dictum, noblesse oblige, he has taken upon himself the sovereign task of founding a University by his solitary and magnificent efforts—a University in the true Oriental style, intended to foster our Art and Culture and our own Mother tongue, Tamil studies. It truly recaptures the genius and splendour of our former times, and stands in grandeur as the seat of modern Indian renaissance, even as Nalanda and Taxila of ancient days.

Situated at Chidambaram, the holy spot where Lord Nataraja with his Divine dance attunes the Universe to spiritual height, the Annamalai University radiates a sublime charm partaking of His all-pervasive spiritual grace. Its atmosphere is permeated by Sath, Chit, Anand, brightening the body and mind and sweetening the soul.

The career of the Founder is a chapter not only in India's commercial and industrial history but also in the educational history thereof. May the university flourish in the chosen path of its Founder, and may the Rajah Saheb and his successors live for long, long years brightening the pages of his University and those of India.

MR. C. R. REDDY, M.A. (CANTAB.), HON. D.LITT., M.L.C., Vice-Chancellor, Andhra University, Waltair

I associate myself most heartily with the movement to celebrate the Shashtipurti of Rajah Sir Annamalai Chetti in a befitting manner. The Rajah Saheb might be justly regarded as a national asset. No merchant or industrialist of South India has spent such large amounts on public benefactions. For a parallel to his philanthropy we have to go to Bombay. He started by making benefactions in the orthodox traditional style of the Hindus. Some of the most expensive and elaborate improvements of the famous Chidambaram and other temples are to be credited to his religious spirit. There are choultries or Dharmasalas built for the accommodation and comfort of travellers which bespeak his sense of humanity. Every project for public good organised in South India has found in him an exemplary contributor. But by far his greatest achievement is the University which very rightly bears his name. Contemporary India and posterity will note how this is the first University founded by private benefaction and how the entire extent of the benefaction rested on the limitless generosity of one single individual, the Rajah Saheb of Chettinad. There is no parallel to this, as far as my knowledge goes, anywhere in the world excepting one, the Rockfeller University of Chicago, founded and maintained by the monetary contributions of a single family. Though the Annamalai University cannot be regarded either from the point of view of the courses or standards organised to be anywhere near the world famous institution in Chicago, still it is the best that has ever been done by an individual in India and is notable furthermore as an example to other millionaires.

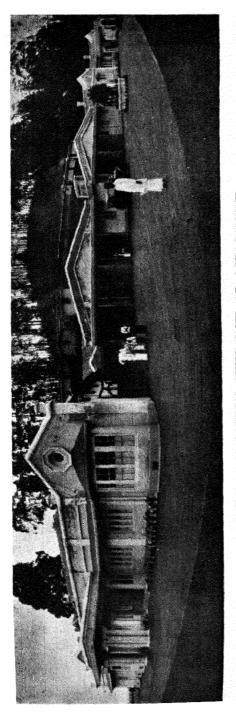
It is not merely by these outward achievements that the Rajah Saheb has made himself famous and endeared, but by his personality. I had the pleasure and privilege of being his guest more than once. No host could have shown more personal attention to the comforts of a guest than the Rajah Saheb whose custom, in accordance with the best traditions of India, has always been to attend personally, though he could easily have appointed deputies. The lavishness of Chettinad hospitality is well-known and is not inferior to that for which some Indian States have become famous. The Rajah Saheb, in spite of his wealth and high dignity and position, is simple in his life and dress; modest in his manner and most considerate in his dealings with others. He makes no distinction between the different linguistic divisions in the Presidency. He has Andhra affiliations as the owner of an extensive Estate in Chittoor District. His possessions in Burma and interests in Ceylon and Indo-China mark him out not only as a national but as an inter-national figure. And wherever he has property, he has also exercised philanthropy.

Rajah Sir Annamalai Chetti ranks among the worthiest in the country. Most successful as a maker of money, he has been still more noteworthy as a spender thereof on right good causes and progressive projects.

If the service of the country, if the advancement of its material and moral prosperity are amongst the objectives of a University, then the Annamalai University cannot have a better example before it or a nobler inspirer than its own illustrious Founder.

DEWAN BAHADUR S. E. RUNGANADHAN, M.A., Adviser to The Secretary of State for India

Heartiest congratulations Rajah Sahib's 61st Birthday. His wise benefactions have earned him India's homage



THE RAJAH SAHEB'S BUNGALOW AT OOTACAMUND

and gratitude. May his University flourish and promote country's unity and progress. God bless him.

THE RIGHT HON. SIR TEJ BAHADUR SAPRU, P.C., K.C.S.I., M.A., LL.D.

I am greatly obliged to you for your letter of the 5th of August. I note with pleasure that Dr. Rajah Sir Annamalai Chettiar of Chettinad, the Founder Pro-Chancellor of the Annamalai University, will soon be completing his 60th year. I also note with pleasure that the Annamalai University has decided to celebrate the event in a fitting manner.

On this occasion I desire to convey to the Rajah Saheb my heartiest congratulations and best wishes for a long life. The Rajah Saheb's name is an honoured name throughout India as a munificent benefactor of education and culture. If it is a great thing to earn so much wealth, it is a still greater thing to make such good use of wealth. The younger generation in your presidency has every reason to feel grateful to him for what he has done for them, but more than that the entire country has reason to be grateful to him for being one of the very limited number of our wealthy men, who have set such fine example to others. Long after the names of those, who are so much in the public eye at present, have been forgotten the names of men like Rajah Sir Annamalai Chettiar, Jamshedji Tata, Tarak Nath Palit, Rash Behary Ghose and some others, will continue to be remembered with affection and gratitude by succeeding generations of their countrymen and will serve as beacon lights on our onward journey. I, therefore, send him through you my best congratulations and wishes for a long life and I could also ask you, as Vice-Chancellor, to convey to the University, of which he is the founder, my best

wishes for its success and continued service to the cause of knowledge and culture.

MRS. SAROJINI NAIDU, Hyderabad, Deccan

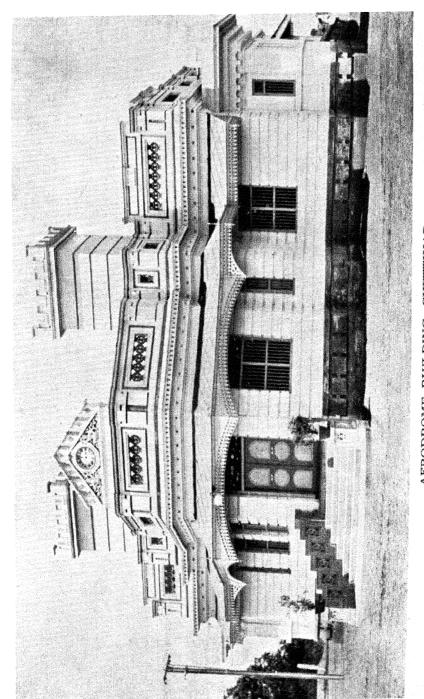
In adding my felicitations to Rajah Sir Annamalai Chettiar on his 61st birthday, I am happy to have this opportunity of expressing my appreciation of his many and far-reaching benefactions.

To the long family record, almost an hundred years old, of pious charities in their chosen city of Chidambaram, Sir Annamalai Chettiar has added a rich chapter by his personal and princely gifts to all fine causes—to promote and foster ancient and modern learning, to encourage literature, music, art and sport, to further movements for social service and social progress, to establish inter-provincial and international friendship. The Annamalai University is in itself an enduring tribute to his splendid generosity.

Not often in our generation has great individual wealth like his been devoted to public welfare and progress with a philanthropy so discriminating in its quality and so catholic in its range.

MR. S. SATYAMURTI, B.A., B.L., M.L.A.

I have had the pleasure and the privilege of knowing him intimately for many years now. The highest tribute, I can pay to him, is that he is every inch a gentleman. I have not met a more polished, courteous, or thoughtful gentleman. To have renovated the renowned temple of Sri Nata-



AERODROME BUILDING, CHETTINAD

raja, is by itself an imperishable monument to the Rajah's distinguished family.

The Rajah Sahib has done still a greater service to the country by founding the Annamalai University. From inside knowledge, I know his paternal care and solicitude for the welfare and the progress of the Institution.

His recent contribution towards the development of Tamil Music may, I hope, mark a turning point in the history of Tamil Culture. People earn a good deal, but give very little. But the Rajah Sahib has given over a crore of Rupees for charities. May God Sri Nataraja bless him. May he and his family live long, prosperous, and happy lives and serve the cause of the country.

THE HON BLF. D. S. SENANAYAKA, Minister of Agriculture and Lands, Ceylon Government

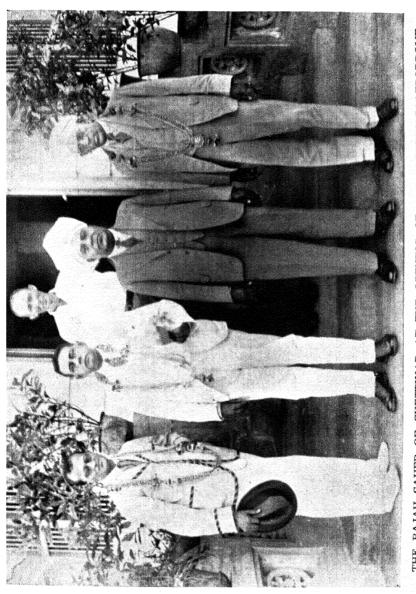
I am obliged to Sir K. V. Reddi and his Committee for giving me the opportunity of paying my own humble tribute to a personality whose radiating influence has cheered many thousands of human beings in South india and Ceylon. My wife and I have vivid recollections of the lavishness of the hospitality of the Rajah of Chettinad during our brief sojourn in his city. That hospitality, shown to strangers within the gates, is but the gleam of one facet of a gem whose lustre shines in and illumines the darkest recesses of a structure of society which, alas, is still not without its dark places. We in poor Ceylon gasp in wonderment at the fabulous tales of untold wealth among our neighbours which at times reach our ears: we thrill with a sense of indefinable pleasure when we hear that a few, at least, of the possessors of that wealth are not content unless they disburse that

wealth for the common good. The founding, equipping, and endowing of an entire University by one single individual seems a miracle to us in this country who can scarcely find a benefactor to endow one single Chair. But we take some comfort from the thought that the inspiration of such an achievement cannot altogether be lost, and that though we have no Annamalai Chettiars in our midst the emulation of the Rajah Sahib's benefactions can still be attempted on a smaller scale. I have heard it said that one who lives to his sixtieth year is entitled to be called a purna ayus, one who has lived a full life. It is my prayer, and I know it is the prayer of all in Ceylon who are acquainted even in the slightest degree with the person or the achievements of Rajah Sir Annamalai Chettiar of Chettinad, that he will be spared for many, many more years to come so that his life may be fuller and richer for the good of his own country and the world in general.

MR. P. SESHADRI, M.A., M.B.E.,

Principal, Government College, Ajmer and President, All-India Federation of Educational Associations

May I join in the felicitations which will be conveyed to the Hon. Rajah Sir Annamalai Chettiar on the auspicious occasion of his completing sixty years? His magnificent endowment for the creation of the Annamalai University is one which will make his name immortal in the history of Indian education. There have undoubtedly been many benefactors of education in various parts of the world, but the example of one whose princely generosity is responsible for the creation of a whole University is unique. The numerous well-wishers of the Rajah can do no better



THE RAJAH SAHEB OF CHETTINAD AT THE OPENING OF THE CHETTINAD AERODROME

on this occasion, than to hope that the Annamalai University will soon take its rank among the best Universities of India and prove worthy of the great generosity of its founder.

SIR SHAFAAT AHMAD KHAN

I am delighted to hear that preparations are being made at Annamalainagar to commemorate the noble services of the Rajah Saheb of Chettinad. His love of learning has found perfect expression in the Annamalai University. It is a growing and expanding organism, pulsating with activity, and is a living definition of the intrinsic greatness of the Rajah Saheb's heart and mind. As an inconspicuous Professor of Madras University, I had the privilege of making his acquaintance in Madras in 1920-21 and I have a vivid recollection of the grace and charm which his conversation radiated. Our paths diverged in 1921 and I do not think we met again. But I have kept in touch with the currents of events in Madras and I find that during the last twenty years, the Rajah Saheb has developed a personality and organised enterprises of which, I must confess. I had little expectation at the time I met him in Madras. He is now one of the foremost philanthropists of India, and his wide sympathies, practical work for the social and economic uplift and absolute sincerity have spread his name and reputation through the whole of Southern India. He is a model of what an Indian Merchant Prince ought to be. Bacon says that the nobler a man is, the greater the objects of passion he has. The objects of the Rajah Saheb's passions are many, but the Annamalai University is naturally the first object of his affection. He has put the impress of his personality on this hallowed institution, and I have no doubt that it perpetuates the work of its founder in a manner that

is in perfect conformity with the spirit of its Founder. I wish India had more Chettinads at the present day, so that the humblest citizen may have an opportunity of nourishing himself on the best and noblest in our Indian culture."

HIS HOLINESS SRI-LA-SRI SHANMUGA DESIKA GNANASAMBANDA PANDARASANNADHI AVL,

'Adhinakarthar of Dharmapuram Adhinam, Dharmapuram, Mayavaram,

May Lord Chockkanatha shower His choicest blessings on you, grant you long life, prosperity, peace and everlasting happiness.

Words fail to express your manysided activities, charitable and religious for the benefit of humanity especially to the South Indians. As an ardent devotee of Lord Nataraja, you deserve the well-deserved admiration of all worshippers and devotees of Lord Siva by your munificent contribution to the repairs of His Shrines on the mundane globe at Chidambaram and Karur, and by your large-heartedness in having established a residential University in the vicinity of His Shrine at Chidambaram accessible to students of all classes, regardless of caste, creed, religion and party politics. As pious as the Nainmars, you have in every possible way striven and are still striving to enrich and enliven the heritage of the South Indians—Tamil Literature and South Indian Music by your unequalled generosity by creating specific endowments for this purpose. Your liberal charity with a unique broad outlook, with a humanitarian object, devoid of all ostentation with no tinge of self in it, and non-fanatic, will hand down to posterity your name and fame as long as life exists in the world. You have by your unstinted help to all deserving of help irrespective of any other condition social, religious, political or territorial set a living example to others by giving a lead to show how on this earth one possessing wealth and influence and power can best serve the public, especially the poor.

May the Almighty bless you and guide you in your future career to continue the selfless task of sacrifice you have undertaken.

SIR JAMES SIMPSON

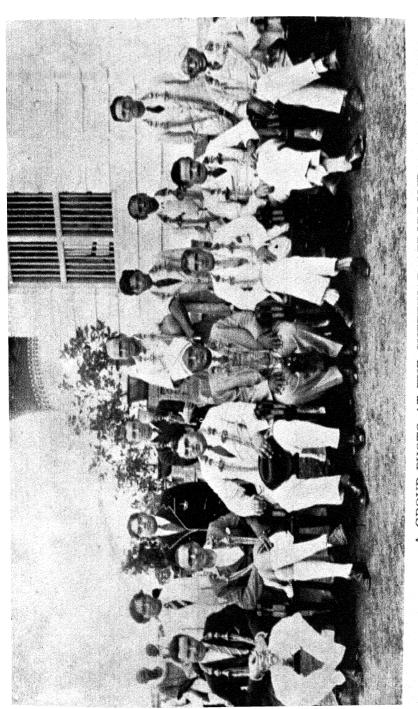
Sir James and Lady Simpson join heartily in the Commemoration of the Sixtieth Birthday of the Rajah of Chettinad. They recall very affectionately the many happy visits and long years of friendship and association with the Rajah Saheb and his family.

What an achievement for sixty summers and what a remarkable contribution the Rajah has made to the Cultural, Political, Economic and Social life of India! Long may he be spared further to adorn his chosen motto "Strive, Save and Serve."

SIR P. S. SIVASWAMY AIYER, K.C.S.I., C.I.E., B.A., B.L., LL.D.

I am very glad to hear that the Annamalai University has resolved to celebrate the 61st birth-day of Rajah Sir Annamalai Chettiar, the founder and Pro-Chancellor of the University, and has decided to present to him a commemoration volume. Rajah Sir Annamalai Chettiar comes from a family of Nagarathar Chettis well-known in South-

ern India for its numerous charities. I knew his elder brother Dewan Bahadur S. Rm. Ramaswami Chettiar and greatly appreciated the interest he took in the administration of Chidambaram Municipality and the Taluk Board, and the health, education and welfare of the Chidambaram The leaders of the Nagarathar community have always been noted for their charities, but they were generally of a more or less religious character: they have taken great interest in the repair, renovation and beautification of the great Siva temples in Southern India, in the construction of choultries for the feeding of the poor and in the foundation of religious Pathasalas and other forms of charities sanctioned by Hindu usage. The Rajah's family has set an example of a more enlightened form of public benefactions in accord with modern ideas and present-day needs. Rajah Sir Annamalai Chettiar is the illustrious representative of his family. It is not possible to enumerate the many charities which he has founded or supported. The Annamalai University is the greatest monument of his enlightened munificence. He has encouraged western as well as Oriental learning and culture, secular as well as religious learning, the fine arts as well as literature and science. The administration of his charities has not been marked by any narrow-minded communalism such as has become the bane of South Indian life, and will, it is hoped, continue to be free from any such influences. The numerous charities of the Rajah have earned for him the undying gratitude of Southern India. I offer him my most cordial felicitations on the auspicious occasion of his sixtieth birthday and pray that he may be blessed with health and strength to guide the Annamalai University for many years to come with his broad-minded outlook and generositv.



A GROUP PHOTO AT THE CHETTINAD AERODROME

THE RT. HON'BLE V. S. SRINIVASA SASTRI, P.C., C.H., LL.D., M.L.C.

I am happy to be allowed to congratulate the Rajah Sahib of Chettinad on his sixty-first birthday and to wish him many more years of prosperity and honour. Like hundreds of other people I have received favours and kindnesses from him without number. These I have acknowledged elsewhere; it is not possible to acknowledge them adequately. More than these is the affection and personal attachment that prompt them. What I have done or can ever do to deserve it all has puzzled me for a long time. It was in the old Council hall at Delhi that we met first. The friendship that began then has continued without a break, the years have strengthened and deepened it. We have had few trials and tasks in common, we have not been engaged together in literary or business pursuits, we have not journeyed together in India and abroad or studied men and measures out of the same books. What has drawn and held us each to the other? I cannot flatter myself that I am capable of doing him any service, material or other. The flow of benefits between us, copious and uninterrupted, has ever been in one direction and one direction only. In the nature of things it cannot be otherwise. Am I wrong then in regarding the bond between us as an example of that "subtle inner force" which the Sanskrit poet postulates as the essence of love?

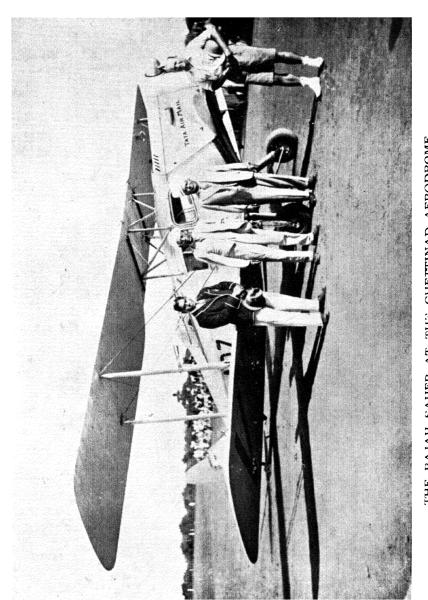
Annamalai University comes late in the story. I was sixty-six when the Rajah entrusted it to my care. For five years he gave me his confidence and support in the fullest measure. Twice during the strike of students the institution was in serious peril, and as a change of policy seemed to me scarcely proper, I implored him to relieve me and try

another management. His practical wisdom was truer than mine. He left me to weather the storm as I might; and though I have no reason to boast, the result vindicated his patience and his trust in me. I do not wish to live a day after I have ceased to be thankful for such a blessing.

Of the Rajah's many-sided career, I have no detailed knowledge. I shall not presume to portray his character or canvass the qualities that have enabled him to conquer difficulties and achieve success. Two points, however, which may seem small to the superficial observer, I venture to pick out for special mention. A teacher of youth cannot do less in holding up to their admiration and imitation the life of a patron of youth. Though he can employ agents and secretaries and relieve himself of anxiety and hard work, the Rajah rises early and goes to bed late and fills the intervening hours with serious business, carefully allotted and planned. To idle pastimes and strenuous games on the field, he is a complete stranger. Still he seldom misses an engagement or neglects a social duty, and I have always envied the equability of temper which enables him to greet all persons, high or low, friendly or unfriendly, with the same engaging smile.

MR. K. SRINIVASAN, Managing Editor, "The Hindu", Madras

It is with great pleasure that I offer my felicitations to the Hon'ble Rajah Sir Annamalai Chettiar on the completion of his 60 years. I wish him long life, health and continued prosperity.



THE RAJAH SAHEB AT THE CHETTINAD AERODROME

DIWAN BAHADUR R. SRINIVASAN, M.L.C., President, The Madras Provincial Scheduled Castes Federation

Dr. Rajah Sir Annamalai Chettiar of Chettinad has been spending a large sum of money for several years on educational institutions in India and abroad, women's cause, religious charities, renovations and maintenance of temples, particularly Sri Nataraja Temple at Chidambaram where Saint Nanda's shrine remains most sacred.

Rajah Sir Annamalai Chettiar is a generous hearted gentleman, a great benefactor and a sincere friend of his race.

MR. R. M. STATHAM, M.A., I.E.S., C.I.E., Director of Public Instruction, Madras.

It gives me the greatest pleasure to send a message for the Commemoration Volume to be presented to Rajah Sir Annamalai Chettiar of Chettinad on the occasion of his 61st birthday. I have been connected with Education in this Presidency for over 28 years and I am therefore fully able to appreciate the immense contribution which the Rajah Sahib has made to the furtherance of Education in all its branches. It would be difficult to find another public man who has given so liberally and willingly not only for the establishment and improvement of many types of educational institutions but for all forms of deserving charities. His gift of 20 lakhs of rupees for the founding of a Unitary and Residential University at Chidambaram has been a unique feature of the development of higher education in this Province. In thus remembering Rajah Sir Annamalai Chettiar's wide generosity I am sure that he would like us also to remember that for nearly one hundred

years the members of his family have set aside large sums of money for religious and educational purposes in and around Chidambaram. I can only conclude by expressing the most sincere wish that the celebration which we are now commemorating may be most happy and successful and that Rajah Sir Annamalai Chettiar may long continue to extend his wise and generous patronage to the work of advancing Education in this Province.

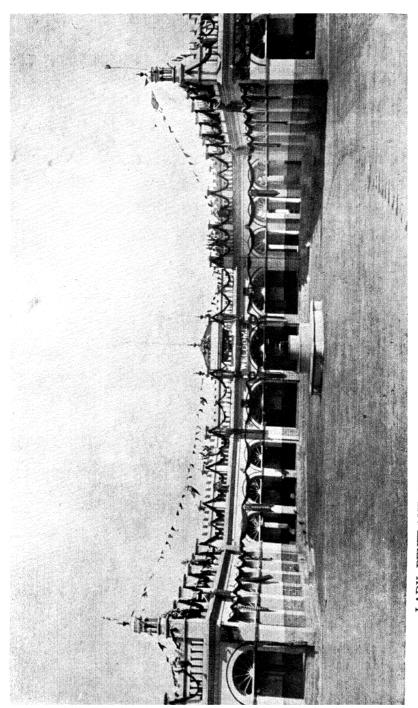
RAJAKARYAPRAVINA MR. N. S. SUBBA RAO, M.A., (CANTAB), BAR-AT-LAW

Vice-Chancellor, Mysore University.

It is a great pleasure to add my own tribute to those of others to the Rajah Sir Annamalai Chettiar of Chettinad on the happy occasion of the completion of his sixtieth year. It was my privilege to take part in the celebrations of the Founder's Day in 1937, and I took advantage of the occasion to pay my tribute to the munificence of the Rajah in the cause of higher education in South India. His munificence recalls the remarkable manner in which the millionaires of America, J. P. Morgan and Rockfeller, have advanced the cause of higher education and research in America. It is very much to be hoped that the great example of the Rajah will find numerous and equally generous imitators.

KULAPATI P. A. SUBRAMANIA IYER, M.A., L.T., Triplicane, Madras

On this blessed day, the 61st Birthday of the Hon'ble Rajah Sir Annamalai Chettiar, my thoughts go back to a period of time, over twenty years ago, when he conceived the happy idea of founding a Collegiate Institution at



LADY PENTLAND WOMEN AND CHILDREN HOSPITAL, CHETTINAD

Chidambaram and naming it after his mother of blessed memory. The Sri Meenakshi College, which has since bloomed into Annamalai University at Annamalainagar, then came into being.

I am proud at the recollection that I was present with the Rajah to meet the University Commission headed by Sir Ramunni Menon that came to Chidambaram to recommend the affiliation of the Sri Meenakshi College to the Madras University.

Prior to this time and later also, we used to have long conversations about this institution—the selection of the site, the choice of the staff, the equipment of the Library, Laboratories etc. etc. When, some years later, he met me one evening and said that the preparations for the foundation of The Annamalai University had been completed and that it would soon commence to function, nobody was happier than I.

"Mighty of heart, mighty of mind, Magnanimous—to be this is indeed to be great in life, to become this increasingly is indeed to advance in life—in life itself, not in the trappings of it," said Ruskin years ago. Who that knows the Rajah and has watched his benefactions of various kinds, and, particularly, the rise and growth of the Annamalai University would not say that this description applies very aptly to him? All his life the Rajah has been 'scorning delights and living laborious days,' living on almost ascetic fare, sleeping for not more than four to five hours a day (he once told me this), and with an intelligence, keen and unsleeping, keeping watch over every little detail of the business of his vast estates in and beyond India, practising, with meticulous care, punctuality, method, preciseness, economy of time and speech, to the wonderment, delight and admira-

tion of all who have anything to do with him. May we not pray that soon he may be enabled to extend his benefactions by the addition to the University of a first-rate Technological Institute equipped on up-to-date lines?

"To strive, to save, to serve"—This has been his personal motto. How much has he not striven? And how much has he not saved and given away to others for their benefit!! In thus saving and giving away, he has been walking in the foot-steps of the *Upanishadic Rishis* of old whose maxims, as quoted in Taittariya Upanishad, were:

- (a) Annam Bahukurveeta.Do multiply food.
- (b) Nakanchana Vasathou.....Pratyachaksheeta.
 Tasmat.....Bahvannam Prapnuyat.

Do not deny shelter to any one that seeks it. Therefore acquire abundance of food.

And all the commentators on the above say that this gathering of *Annam* is for the purpose of giving to those who are in need.

All honour to the Rajah who alike by the manner of his personal life and by his rich benefactions is setting a bright example to all mankind!

Subhamastu.

DEWAN BAHADUR K. SUNDARAM CHETTIAR, Retired High Court Judge

Let me avail myself of the privilege of paying a tribute of praise in the form of a message to Dr. Rajah Sir Annamalai Chettiar of Chettinad, at the celebration of a memorable event in his life-time, viz., his completion of his sixtieth Born in a very respectable aristocratic family, with a golden spoon in his mouth, his career in life has been unique in its glory. Endowed with a heritage of wealth, he has worked himself up to the pinnacle of name and fame, by means of his remarkable skill in the business of commerce and banking, and being equipped with a deep insight, a spirit of adventure, sound common sense, admirable tact, and suavity of manners. Having been blessed by the Goddess of Wealth in the wide vista of his undertakings, his generous heart inspired him to lavish his riches in numerous kinds of charities, which would make his name to be treasured up in the memory of posterity, as that of a great benefactor. His philanthropy has come out with shining lustre, from out of the crucible of action. While the possession of even large surplus wealth, is no prompter for the utilisation of any portion of it for the good of others, which is a sorry spectacle in the case of many, is it not a matter for admiration that the Rajah of Chettinad has not merely stopped with generous intentions, but has given them concrete shape with a spectacular effect? Many and varied are his benefactions, which can be rightly characterized as princely.

In the field of education, his monumental benefaction is the founding of the famous Annamalai University. What was a barren tract of land, has now become Annamalainagar, a splendid colony with beautiful buildings, spacious halls, hostels, residential quarters, play-grounds, libraries, and laboratories. His religious charities reached their climax in the recent renovation of Sri Tillai Govindaraja temple at Chidambaram. His steadfast loyalty to the Crown has been strikingly manifested in his generous contributions and in several other ways.

Many humanitarian causes in South India and elsewhere, have had his generous response. A patron of music, his sympathy for its encouragement and development is laudable. It is no wonder, that he has been the recipient of high and rare honours in the world. Above all, he has earned the deep gratitude of humanity as also the benign Grace of the Almighty.

May God shower His choicest blessings on him and may he live long with sound health and happiness.

SIR ALEXANDER TOTTENHAM, C.I.E.,

Administrator, Pudukottai State

It is a pleasure to me to send a message on the occasion of the Sashtiabdapurti of Rajah Sir Annamalai Chettiar. I have had the pleasure of his friendship for about 30 years. He and his brother were, I think, pioneers amongst the Nattukkottai Chettiars in making large gifts to promote education, medical relief and similar objects. Previously, the Nattukottai Chettiars confined themselves mainly I think to "tiruppani" and constructing large uranis.

Perhaps the most striking example of his liberality is the foundation of the Annamalai University. It is a striking monument of his generosity. In addition he has made large donations to a number of Colleges and Schools in Madras Presidency, in Burma and even in Ceylon; as well as to institutions for the study of the Vedas and Sastras. He has also been a liberal patron of Indian music.

He has given liberal donations to various Ladies' Clubs and Associations and Hospitals intended for the welfare of women.



THE RAJAH SAHEB OF CHETTINAD

At the same time, he has spent large sums on the traditional objects of Nattukottai Chetty munificence.

I think he must be easily the premier philanthropist of South India.

I am glad to associate myself with the congratulations to him on this occasion, and wish him long life and prosperity, and his University every success.

SIR MAHOMED USMAN, K.C.I.E., B.A., M.L.C., Vice-Chancellor, University of Madras

I congratulate the Annamalai University on celebrating the completion of the sixtieth year of its distinguished founder, Rajah Sir Annamalai Chettiar of Chettinad, who is the Pro-Chancellor of the University. His large-hearted charities to various educational, religious and other institutions in this Presidency are well-known. By these generous gifts he has earned the gratitude, esteem and affection of the people of this Presidency. The most outstanding act of his philanthropy is the foundation of the Annamalai University, which is the only Unitary, Teaching and Residential University in South India and whose special aim is the encouragement of South Indian culture. He will ever be remembered by posterity as a great benefactor and a great patron of learning in Southern India. I wish him long life and happiness of every kind.

SIR S. VARADACHARIAR, Judge, Federal Court, Delhi

It is quite in the fitness of things that the Annamalai University should celebrate the Shashtyabdapurthi of its en-

lightened founder. The Community to which Rajah Sir Annamalai Chettiar belongs has long been known for the Philanthropy of its members; but, it has often been remarked that their Endowments were limited to the traditional lines, and did not take sufficient note of the needs of the changing times. Sir Annamalai Chettiar's family was one of the earliest in the Chettinad to recognise the force of this Criticism and to give the lead in the direction of what may be called 'enlightened charity.' In his own time, the Rajah has, in his innumerable acts of public munificence, shown a striking catholicity of outlook and a wise discrimination in the choice of the objects of his bounty, happily combining the old outlook and the new vision.

The Annamalai University is an experiment in the service of a high ideal and it is no wonder that criticisms and suggestions continue to be heard even from well meaning quarters. I have no doubt that the Rajah and those associated with him in the administration of the affairs of the University will keep the ideal constantly before them and the Rajah will be proud to see the day when the Annamalai University comes to be recognised on all hands as a fulfilment of that ideal. May a kindly Providence be pleased to spare him for many more years of useful and philanthropic service to his mothreland.

SIR M. VENKATASUBBA RAO, Agent to The H.E.H. The Nizam of Hyderabad and Berar, Nagpur

On this happy occasion of the Shastipurti of the Rajah of Chettinad my wife and myself send him warm greetings and most sincere good wishes.

South India has produced shining lights in several spheres—in statecraft, science and scholarship, law and medicine; but in philanthropy—judged by modern notions the same good fortune has not fallen to our lot. The Rajah of Chettinad as a philanthropist, while ranking with the most prominent in any part of India, is in our province first and foremost. His benefactions are so outstanding and so manifold that they will be gratefully remembered through many generations. From every side we hear of a new worldorder based on economic justice; that however, in spite of the sincerest efforts, will be long in coming. Meanwhile, the man in the street feels chagrined at the galling contrast between extreme wealth and extreme want and challenges the very basis of society. There are a few among the wealthy of the world who realising this make inequality less irritating by giving generously for the public weal. The Rajah of Chettinad belongs to this band of discerning men and may be truly described as the Prince of philanthropists in South India

May good luck attend him.

MR. C. VIJAYARAGHAVACHARIAR

I am greatly delighted to hear that the Sashtipurthi of the Hon'ble the Rajah Sir S. R. M. Annamalai Chettiar of Chettinad will be celebrated suitably on the 28th September 1941. I warmly offer my heartfelt congratulations on the event. It is by no means easy for me adequately to describe the unique character of the great benefactor and founder of the Annamalai University. This University may be said to be a model one in all India. I particularly note with feelings of gratitude that Physical Training is compul-

sory on all the students of the University and that lectures on Physiology, Health and Hygiene are delivered weekly. May I also venture to suggest that compulsory Military Training is called for by the unexpected crisis of the World. I call attention to the fact that Nazism is threatening even India both from the West and the East. Hence the necessity for the said military training. May I also venture to suggest that Hindi, the future National language of our country, be introduced as one of the subjects of the University. I need say no more. I am proud of the fact that the great man is a personal friend of mine. I prayerfully wish the founder and Pro-Chancellor long life and prosperity, so much so that his ninetieth birthday may be celebrated thirty years hence even with far greater enthusiasm and gratitude than it is possible at present, when also the Annamalai University may be the unrivalled model university in all India.

DEWAN BAHADUR SIR T. VIJAYARAGHAVACHARIAR, K.B.E., Dewan, Mewar State

It has often been a matter of complaint that there are not as many public benefactions connected with education in Madras as there are in some other major provinces of India. This is probably due to the fact that compared with those provinces, Madras is deficient in the number of wealthy citizens who can afford to make large benefactions. The Nattukkotai Chetty Community is probably the wealthiest section of the Madras population, but though they have made abundant contributions to public objects, these objects have been more of a religious character than of educational. My old friend, Sir Annamalai Chettiar, is a shining exception to

this. He has devoted a large sum to found the University which has been named after him. It is located in the heart of the Tamil country and one of its main objects is to foster Tamil learning and culture. It is not given to many in any country outside the United States to found a University of their own. A unique foundation of this character deserves commemoration by the citizens of the Province. So far as the founder is concerned, his name will live in the good work which the Annamalai University is carrying on. But an obligation lies on his fellow-citizens to express their grateful admiration of this great charity and it is a happy thought to make his sixty-first birthday the occasion and a Commemoration Volume the medium of the thanksgiving.

SIR ZAFURULLA KHAN, K.C.S.I., Law Member, H.E. The Viceroy's Executive Council

It has given me very great pleasure to learn that the Annamalai University proposes to celebrate the completion of his 60th year by Dr. Rajah Sir Annamalai Chettiar of Chettinad, the Founder Pro-Chancellor of the University, in a fitting manner. I have myself been the recipient of many gracious kindnesses from Rajah Sir Annamalai Chettiar, and know that the scope of his charities is not restricted by any considerations of caste, creed, or nationality. It is only right that the occasion to which I have referred above should be duly celebrated by the great institution which he has founded, and which is only one—though the principal one—of his numerous efforts in the service of his fellow beings.

MR ABDUL HAMEED KHAN, M.L.A.,

Ex-Mayor of Madras, Leader: Madras Legislative Muslim League Party.

Dr. Rajah Sir Annamalai Chettiar of Chettinad is one of the most eminent sons of India. He is as good and successful a business man as he is bountiful and liberal. He has given away about a crore of rupees in charity in India and elsewhere. The large sum of money he is spending on the University at Annamalainagar, in the neighbourhood of that ancient town of Chidambaram, shows his large hearted munificence and zeal for higher education. His systematic and deliberate policy of protection of Tamil learning is manifested in his generous provision for its study in his University at Annamalainagar.

Rajah Sahib of Chettinad has in him, too, all the qualities of a leader of men. He has much of the charm of manner, ready humour and almost tender loyalty to his friends which makes a great leader.

Rajah Sahib is fortunate in his sons who are fine men, excellent and of striking merit. There is in Kumararaja Sir M. A. Muthia Chettiar of Chettinad a gentleman who, though comparatively young, has already reached a position of eminence by his wisdom and charming manners. He, like his great father, is very much interested in the advancement of learning and culture.

It gives me genuine pleasure to felicitate the Rajah Sahib of Chettinad on the happy occasion of his 61st Birthday and wish him a long life of everlasting usefulness and uninterrupted peace and happiness.

KHAN BAHADUR ADAM HAJEE MOHAMED SAIT.

Ex-Sheriff of Madras,
Director, Central Board of the Reserve Bank of India.

On the happy occasion of my esteemed friend and leader Dr. Rajah Sir Annamalai Chettiar entering upon his

COMMEMORATION VOLUME

Sixty-first year I have much pleasure in associating myself with the chorus of good wishes, praise and congratulations that will be pouring in from all parts of India. His is an eventful life distinguished for its manifold services to society. Rajah Saheb has filled with honour eminent positions of leadership. As a vigilant legislator, as a charming Prince among merchants, as a great patron of learning and arts, he has endeared himself to the entire people of South India who have nothing but praise for the Rajah Saheb and who, with one voice, pray to the Almighty that He may shower his bountiful gifts on the Rajah and the other members of his family. The Rajah is fortunate in his sons. Among them, Kumararajah Sir M. A. Muthiah Chettiar has already come to prominence in the public life of this Province, as a tireless worker for the economic and political regeneration of this country. Let me offer my humble tributes and hearty good wishes for the long life, health and prosperity of the Rajah Saheb of Chettinad.

BASHEER AHMED SAYEED, M.A., B.L., M.L.A., Advocate, Member, Syndicate, Madras University.

It is a pleasure and privilege to contribute a few lines to the Commemoration Volume that is to be published in connection with the 61st Birthday of the Rajah Saheb of Chettinad. It is but meet that the Sixty first Birthday of the Rajah Saheb should be rejoiced as a great and eventful day in the annals of South India. Numerous and well-known have been the benefactions of the Rajah Saheb but none could exceed in wisdom, merit and quality his foundation of the Annamalai University at Chidambaram. There could indeed be no greater monument for his philanthropy, charity and munificence than this. His contribution to the spread of knowledge and culture in the shape of this residential University, so well-conceived and so well-planned remains unsurpassed. Greatness of mind,

nobility of character, uniform courtesy, sincerity and thoroughness of purpose have been the unique characteristics of the Rajah Saheb and these have marked him out as one of the most outstanding personalities of our times and his life serves as a pre-eminent model for the younger generation to emulate and profit by. I wish the Rajah Saheb many many more returns of this happy day and pray that he may be spared to us for many a long year to come in the best of health, wealth and prosperity.

P. CHENCHIAH, M.L. Chief Judge, Pudukottai.

Of the various foundations that are being laid for the New India of our vision and hope the surest and the most enduring one is that of knowledge. The universities are among the most powerful engines of National reconstruction in as much as they create leaders who are to take the nation into the land of promise.

Sir Annamalai, a prince among merchants of Nattukotai Community, has set an example for a new consecration of money in his munificent endowment of the Annamalai University. Year after year, hundreds of young men and women carry torches of light into the world and as they lighten the darkness around, look back on the university as the mother who nursed them in the ideals of service and on the Rajah as the great donor who founded it. As I believe that the higher education of the universities is the keystone of national progress, I regard Sir Annamalai a great benefactor whom the country will praise and cherish.

On the happy occasion of Shasti-purti, I join the great company of his friends in wishing him long life and prosperity.

COMMEMORATION VOLUME

HIS HIGHNESS SIR NAWWAB GHULAM MUHAMMAD ALI KHAN BAHADUR G.C.I.E.,

The Prince of Arcot.

I have great pleasure in associating myself with the 61st Birthday celebrations of Dr. Rajah Sir Annamalai Chettiar of Chettinad. The Rajah Saheb of Chettinad is one of the ablest and most successful men of Southern India. He is a good friend and possesses charming manners. There are many charitable institutions which are benefited by his munificence. He has done a great service to the cause of education in Southern India by founding a University which is named after him.

I wish Rajah Sahib long life, full of prosperity and happiness.

MR. G. JANAKIRAM CHETTY, Mayor of Madras.

On the 61st Birthday of the Hon'ble Dr. Rajah Sir Annamalai Chettiar of Chettinad I rejoice to convey to him my humble congratulations. I feel glad to contemplate that his life has been one full of years and full of honours and glory. If ever any person was the architect of his own fortunes, the Rajah of Chettinad was pre-eminently one such. He battled with life and wrested from it wealth, power and glory. Nor were these obtained without anxiety, labour or shocks. Endowed with a prodigious memory and a giant intellect he could plan elaborately and with precision, organise with great thoroughness and succeed with comparative ease. Those who witness only his triumphs hardly know the travail behind these.

And now, after the completion of his sixtieth year he can look back on his work and achievements with justifiable and pardonable pride. By his simplicity, condescension and geniality he has endeared himself to one and all. He is considered as a patriarch in his own community and

one whose word is almost law to its members. He loves them and cares for their welfare as much as he loves and cares for his own children. His piety has led him into charities which few have excelled. His discriminative endowments have won for him a name and a fame which will last as long as India lasts. The Annamalai University alone, not to speak of other charities, will stand as a monument to the greatness of his heart and the regality of his munificence. Shrewd and far-seeing, he made a departure from the time-honoured courses of the charities of Indians and has made an endowment which has an universal appeal. His gifts to his University have not ceased. Yearly contributions and endowments go to swell a benefaction already large. He is guiding its destinies with a sure hand and will soon put it beyond all vicissitudes.

Sixty years are not much in a land noted for the longevity of its inhabitants. May God spare this great philanthropist and benefactor for many a decade to come, so that he may enrich his life of usefulness and service by further deeds which will add greater lustre to his name.

MR. M. PATANJALI SASTRI,

Judge, Madras High Court.

It is with great pleasure that I respond to your invitation to send a message on the occasion of the Shastiabdhapoorthi celebration of the Founder, Rajah Sir Annamalai Chettiar of Chettinad.

My memory goes back to the time when years ago I was a member of the Board of Trustees of Sri Meenakshi College, the nucleus of the great University which now bears his name and I recall how untiringly and enthusiastically he used to work for the institution in those days. It was named after his beloved mother and his attachment to it was marked by an almost filial devotion. How that institution later developed into the only residential Uni-

versity in South India and how the scrub jungle east of the Railway line in Chidambaram was transformed by the vision, faith and bounty of the Founder into the magnificent Halls of Learning and Research over which you now preside forms a romantic and glorious chapter in the history of the educational progress of this Province.

It must be a matter of legitimate pride and satisfaction for Rajah Sir Annamalai to have lived such a useful and successful life for sixty years. "He lives who helps many to live" says a Sanskrit adage. Hundreds have found their living in his beneficent activities, and his indeed must be counted a purposeful life.

Rajah Sir Annamalai Chettiar is in many respects a remarkable man. Keen business acumen, tireless energy, unwearying attention to detail and a discriminating readiness to take risks have combined in his case to produce a fortune which many a prince may well envy. Withal, his personal habits and tastes are of the simplest, and he avoids the usual extravagance of wealth. But if he is frugal so far as his own personal needs are concerned, he is lavish in his contributions to charities. Perhaps there is no philanthrophist in this part of the country, who has made larger contributions to charities, both institutional and private, than he. And their end is by no means in sight. In short, his own favourite motto "Strive, save and serve" may well be regarded as his autobiographical memoirs; for, he has striven mightily, saved thriftily and served nobly.

I wish your celebration all success, and the Founder, many happy returns of the day.

SIR PURSHOTAMDAS THAKURDAS

Rajah Sir Annamalai Chettiar, whilst upholding all the admirable traditions of the great Chettiar clan in the South, has made this most welcome departure, that instead of spending his charitable endowments exclusively on

temples and other extra-conservative forms of charity, he has set the example of spending after more practical and up-to-date needs of his generation in his Province in many ways. The Annamalai University is a striking proof of this, and it is very much to be hoped that the example set by the Rajah of Chettinad will be taken up by all similarly placed in India. I wish the Rajah of Chettinad and the Chettinad family continued prosperity to follow up this most welcome innovation in their dispensation of charitable funds. India cannot have too many of such innovations. I look forward to the Kumararajah of Chettinad's wholehearted support to his illustrious father's noble example.

DEWAN BAHADUR V. SHUNMUGA MUDALIAR Sheriff of Madras.

Rajah Sir Annamalai Chettiar of Chettinad, whose friendship I have enjoyed for over two decades enters on the Sixty-first birthday on the 28th of September, 1941. Let me send my hearty felicitations on that occasion. This great business magnate is the foremost merchant prince, not only in this country, but also in Ceylon, Malaya, Burma, the Strait Settlements and Indo-China. He has been connected with the Reserve Bank of India ever since its inception and is the Director of several other banks of this Presidency. If he is a great business man making a great fortune by his farsightedness, he is a greater philanthropist giving most generously to all noble causes. The Annamalai University is a standing monument to his princely munificence. He has filled with honour and distinction many positions of responsibility and served the country in manifold ways. May the Lord Almighty be pleased to confer on him its choicest gifts and give him a long and unclouded life of happiness and public service.

COMMEMORATION VOLUME

RAO BAHADUR JUSTICE P. VENKATARAMANA RAO, Judge, Madras High Court.

The traditions of Hinduism enjoin various charities and of these the most valued is the gift of knowledge. Annadhanam for the poor is also counted as a great virtue but the gift of knowledge is counted greater still. Gratitude prescribes that we should remember those who have not only furnished the means for relief of the poor of the country but also those who have planted beacon lights in the shape of Universities in our midst. On this auspicious occasion our country will thank God for raising a great donor in the person of Rajah Sir Annamalai Chettiar in South India for the promotion of learning.

An English writer writing on great men remarked thus: "Nor is power alone a sufficient title to greatness. It must be power governed by purpose, by a philosophy, good or bad, of human life, not by mere spasms of emotion or an itch for adventure." Sir Annamalai has utilised the power which wealth has conferred on him for really useful purposes. The motto of Sir Annamalai's house "Strive, Save, Serve" has received a glorious exemplification in the endowment of the Annamalai University. The merchant princes of the Nattukottai Chetti community have rebuilt temples in various places. But Sir Annamalai has given a new turn to the traditional modes of charity by endowing a temple of knowledge. The Annamalai University will be an enduring monument perpetuating his name among generations of students that go out from its portals.

The value of and the beneficial influence which universities are capable of exercising in this country and especially in the regeneration of India in the present turmoil and conflict which is confronting the world are immense and incalculable. In the course of my Convocation Address to the students of the Andhra University last December, I observ-

ed that the true and abiding basis for Indian unity lies in the creation of Indian culture which forges communal cultures into one living whole in art and literature and society and politics and the universities are the competent agencies for inspiring our youth with a passion for unity evoking in them a lifelong devotion to the promotion of a single unified Indian culture and the synthesis of cultures is a special need of India. From the note which has been sent to me by my esteemed friend Dr. Sir K. V. Reddi I find that the Annamalai University has realised this need and has this object in view.

Shastipurthi is a landmark in life celebrated with joy and thankfulness but the joy of the celebration must be great indeed for Sir Annamalai when it takes place in the temple of knowledge he has built. May Sir Annamalai reach the coveted age of hundred years and may the country continue to be the recipient of his benefactions.

K. VENKATASWAMI NAIDU, B.,A., B.L., M.L.C., Ex-Mayor of Madras. Deputy President Madras Legislative Council.

On the occasion of Sastiabdha Purthi of Sri Rajah Sir Annamalai Chettiar of Chettinad let me join in the chorus of appreciation showered on him. Next to Pachaiyappas, Rajah Saheb will live for ever as one of the greatest Educationists of South India. His Annamalai University will be a standing monument of his love of service and culture. By renovating the famous temple of Sri Govindaraja at Chidambaram, he has become God's favourite. His pleasing manners, princely hospitality and an attitude of helpfulness at all times have earned for him the love and regard of everyone. May he live long and continue his beneficent acts.

ANNAMALAI UNIVERSITY

By

Dr. B. V. NARĀYANASWAMY NAIDU

More than twelve years ago the Annamalai University was started, thanks to the generosity and public spirit of Rajah Sir Annamalai Chettiar of Chettinad whose name it bears. Its aims and ideals are similar to those of the other Universities in South India, but it differs from most of them in being both a teaching and a residential University. It differs from them in another respect also. It owes its existence to the munificence and generosity of an eminent citizen of our motherland. His princely gift for the cause of higher education has no parallel in the history of this presidency.

Since the publication of the report of the Sadler Commission, the trend of best educational opinion in the country has been in favour of a unitary, teaching and residential University as it makes for efficiency and economy in higher academic work and provides ample facilities for the moulding of character and the development of a corporate spirit. Early in 1928 the committee appointed by the Government of Madras to examine the need for establishing a university for the Tamil districts, wrote in their report that it was desirable to have unitary teaching Universities and as many of them as the country could afford but that the immediate realisation of this desire was not to be expected as the financial resources even for one such University could not be indicated with any degree of assurance. But

even while these words were being written, the Rajah Saheb of Chettinad was in consultation with the Government of Madras regarding a scheme for the creation of a teaching University at Chidambaram. With princely generosity he offered to hand over to the proposed University the three collegiate institutions for higher instruction in English, Tamil and Sanskrit studies founded by him at Chidambaram and their assets together with twenty lakhs of rupees in cash. The Government recognising the unique nature of the benefaction, came to the conclusion that they should not miss this opportunity of encouraging private effort in the cause of public instruction and establishing a new University of a type, which was admittedly the best, though unknown in the Presidency of Madras.

On the 27th June, 1928, the Government published a communique promising twenty lakhs of rupees towards the endowment fund which was later raised to twenty-seven lakhs and a recurring grant of a lakh and a half per annum. A bill to establish and incorporate a teaching and residential University was published in a Gazette Extraordinary on the 24th August, 1928. It was introduced into the Madras Legislative Council on the 8th September 1928, and referred to a Select Committee of 25 members of the Legislative Council. On the 12th October, 1928, the bill was passed into law. The Act received the assent of the Governor on the 3rd November, 1928 and that of the Governor-General on the 11th December, 1928. The assent of the Governor-General was published in the Fort St. George Gazette on the 1st January, 1929. The Government in G.O. No. 1 dated 1st January, 1929, brought into force several sections of the Act from 1st January, 1929. Thus this unique University in South India came into being. The Chancellor, the Pro-Chancellor, the Vice-Chancellor, the Senate, the Academic Council and the Syndicate constitute the body corporate of the University. The Governor-General is the Visitor of the University; the Governor of Madras is the Chancellor; the Founder of the University is the Pro-Chancellor; the Vice-Chancellor is a whole-time officer, to whom a salary may be paid, who holds office for a period of three years and is appointed by the Chancellor from among three persons recommended by the Founder. At present we have in our midst as our Vice-Chancellor, Sir Kurma Venkata Reddi Naidu, K.C.I.E., D.Litt. M.L.C.

The authorities of the University under the Act are; (1) the Senate; (2) the Academic Council; (3) the Faculties; (4) the Boards of Studies; (5) the Syndicate; (6) the Finance Committee (for a period of ten years from 15th May 1929) and (7) the Board of Selection.

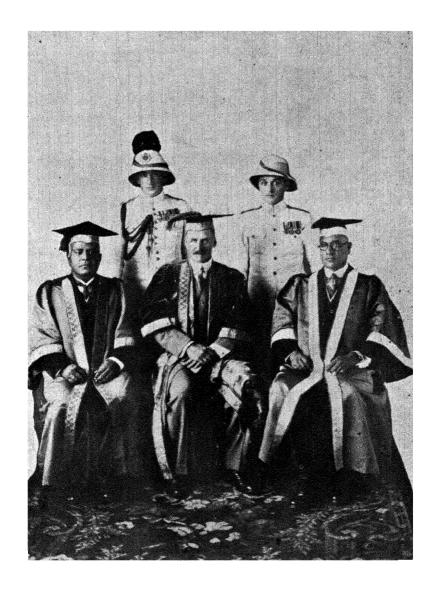
About 150 miles from Madras a stone's throw to the east of Chidambaram Railway Station lies the University Colony named Annamalainagar. The Colony is 540 acres in extent, and the lecture halls, hostels, administrative buildings and residential quarters stand in this area. It is ideally situated in the midst of green fields far from the bustle of town life; and yet it has every amenity that most progressive towns enjoy. During these 12 years magnificent buildings, costing more than 20 lakhs, have come up and great progress has been made in various directions. This is in no small measure due to the tireless efforts of Dewan Bahadur S. E. Runganadhan—at present Advisor to the Secretary of State for India —who was Vice-Chancellor of the Annamalai University from 1929 to 1935, and of the Rt. Hon'ble V. S. Srinivasa Sastri, who was Vice-Chancellor for five years

from 1935 and of our present Vice-Chancellor, Sir Kurma Venkata Reddi Naidu.

In this University nearly a thousand students are pursuing, to-day, various courses of study. Instruction is provided and facilities for study offered from the Intermediate course up to the Ph.D., M.Litt. and M.Sc. degrees. This University is the only one which offers an Honours course in Tamil. Another noteworthy feature is its Department of Music which has done not a little to promote the study of Carnatic Music.

The University Library is one of the best of its kind and is just a few yards from the hostel. It affords every facility for reading and contains many up-to-date books and periodicals. More than 15,000 rupees are spent every year on new books and journals. The study of current journals and periodicals is specially encouraged in this University. The total number of books in the general and sectional libraries is over 50,000. The library receives regularly 248 scientific and learned periodicals. Each Department of Study has its own seminar library for the use of Honours and Research students.

The residential aspect of this unitary and teaching University deserves special mention. Students and teachers live in the same colony and there are many opportunities for fruitful contact of mind and mind. Every opportunity is given to develop in the student not merely a keen and cultivated intelligence but also sound character and a sound physique. The students' hostel is managed by a Warden and a Sub-Warden and five inspectors. Students, too, have their share in the management of the hostel. The Warden is assisted in his work by a Students' Representa-



PRO-CHANCELLOR, CHANCELLOR AND VICE-CHANCELLOR, (IN ACADEMIC ROBES, 1931)



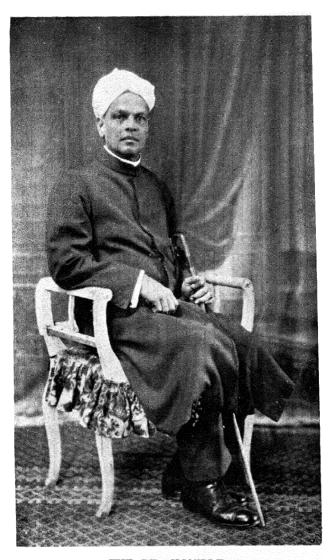
H. E. LORD ERSKINE G.C.S.I. (CHANCELLOR, ANNAMALAI UNIVERSITY, 1934-39)



H. E. THE HON'BLE SIR ARTHUR OSWALD JAMES HOPE, G.C.I.E., M.C. CHANCELLOR, ANNAMALAI UNIVERSITY FROM 1939

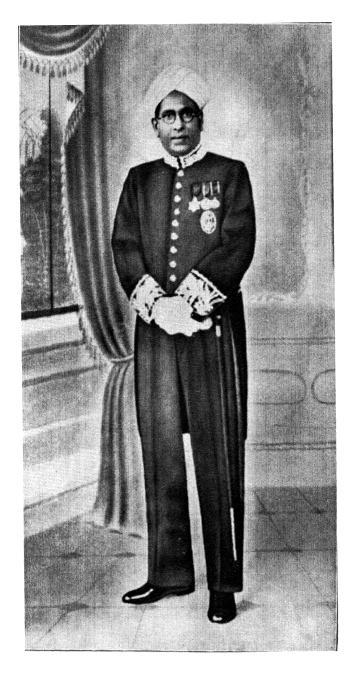


DIWAN BAHADUR
S. E. RUNGANADHAN, M.A., I.E.S. (RETD.),
VICE-CHANCELLOR FROM 1929-1935

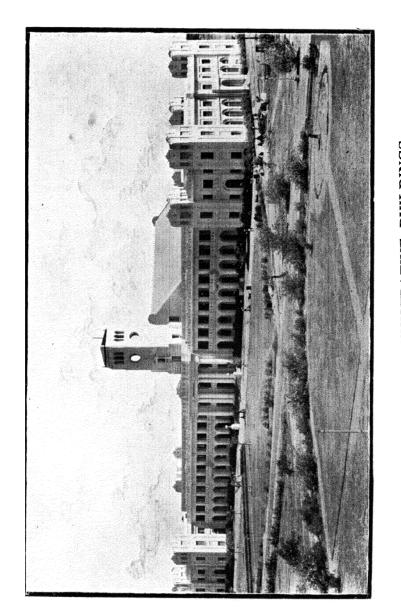


THE RT. HON'BLE

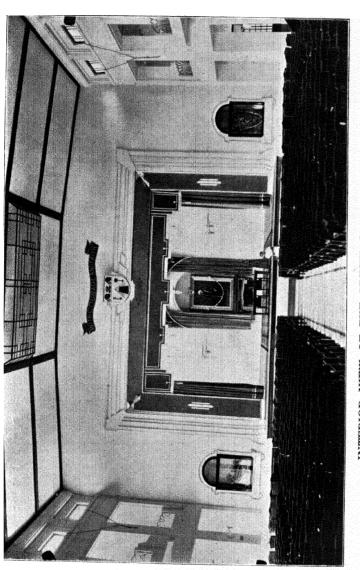
V. S. SRINIVASA SASTRIAR, P.C., C.H., LL.D.,
VICE-CHANCELLOR FROM 1935-1940



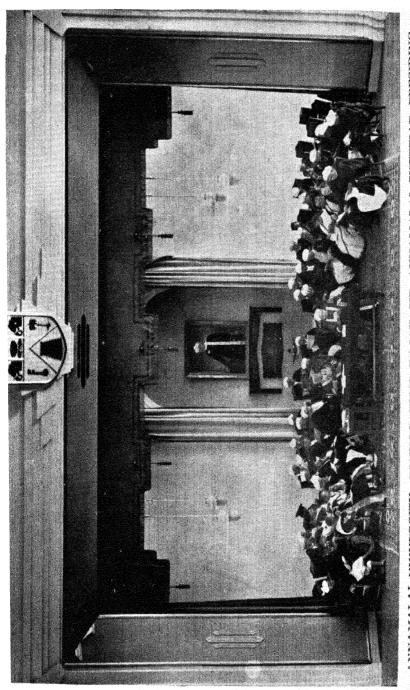
RAI BAHADUR SIR KURMA VENKATA REDDY NAYUDU GARU, K C I E., D.LITT , VICE-CHANCELLOR. ANNAMALAI UNVERSITY FROM 1940



LIBRARY AND ADMINISTRATIVE BUILDINGS



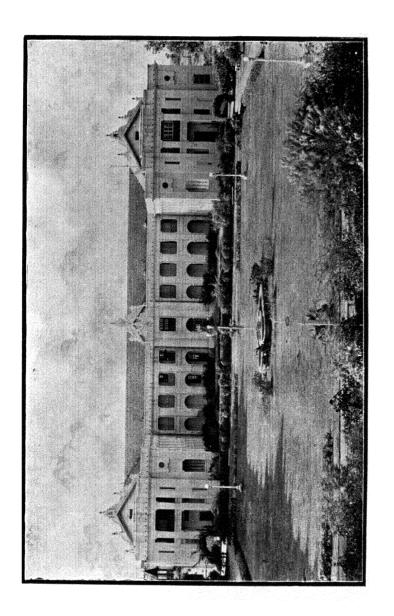
INTERIOR VIEW OF THE SRINIVASA SASTRI HALL

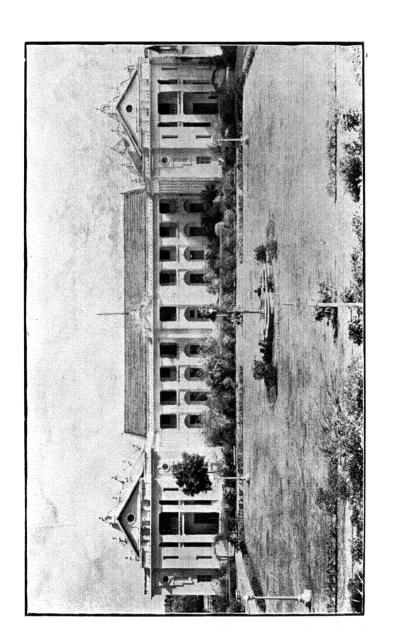


ANNAMALAI UNIVERSITY CONVOCATION, RAJAH SIR ANNAMALAI CHETTIAR PRESIDING

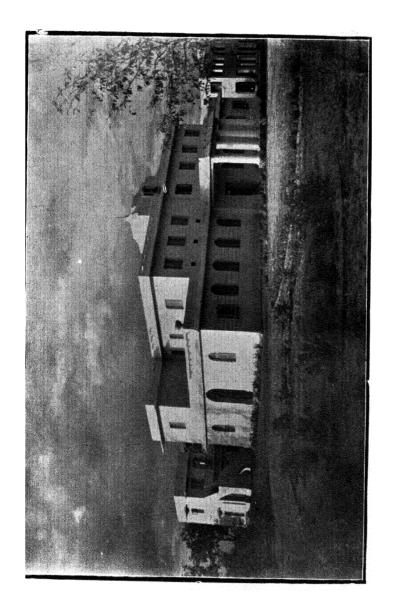
ARTS COLLEGE

ARTS COLLEGE

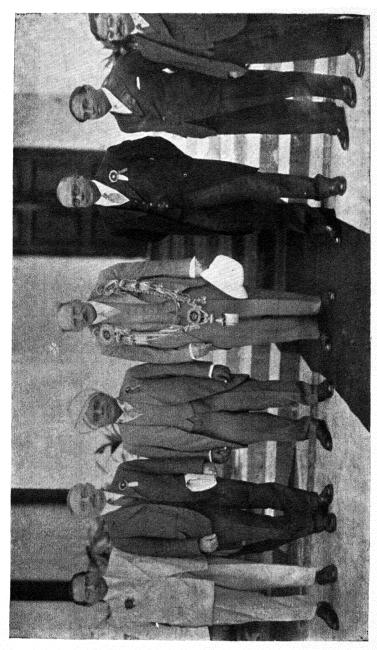




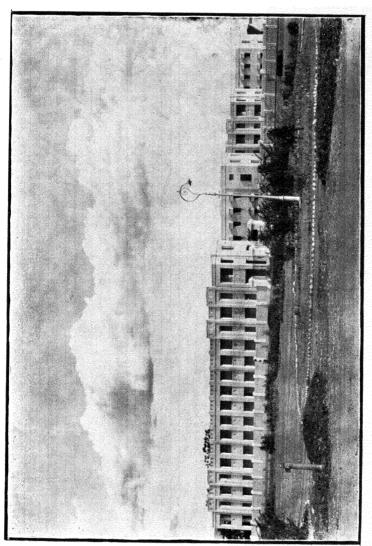
ORIENTAL COLLEGE



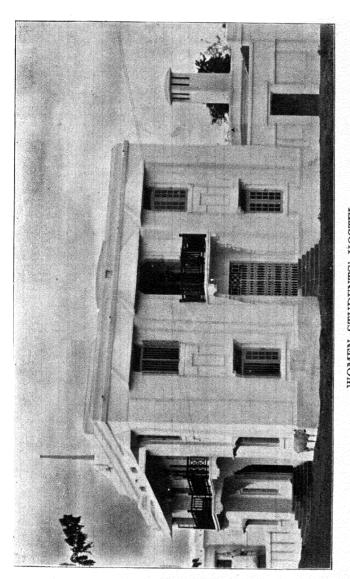
GOKHALE HALL-UNION HALL



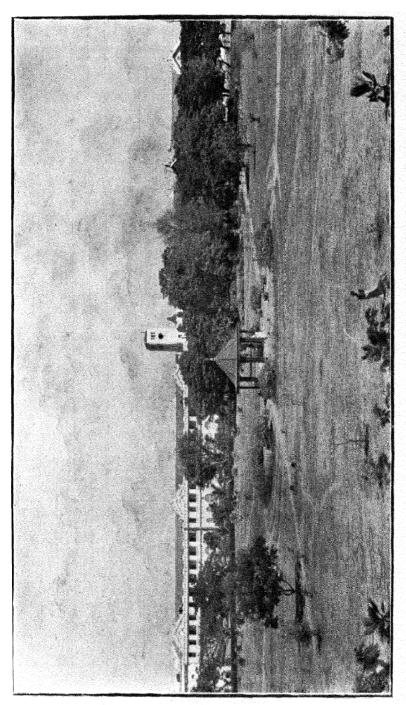
DR. S. N. CHAKRAVARTHI; PROF. C. D. THOMPSON (PRESIDENT); RAJA STANLEY; DEWAN BAHADUR SAHEB; SIR GEORGE FREDERICK STANLEY; DEWAN BAHAU S. F. RUNGANADHAN; DR. B. V. NARAYANASWAMI NAIDU (SECRETARY); PROF. C. N. VAKIL (SECRETARY)



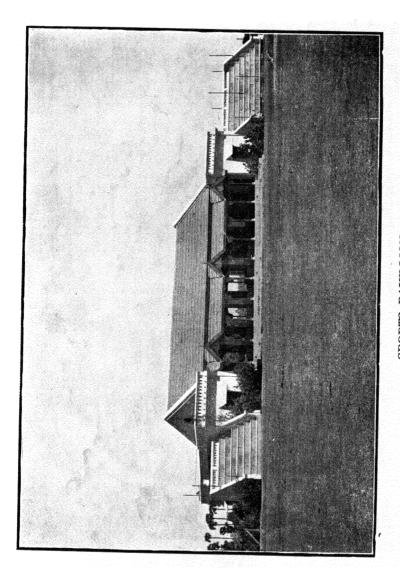
HOSTEL



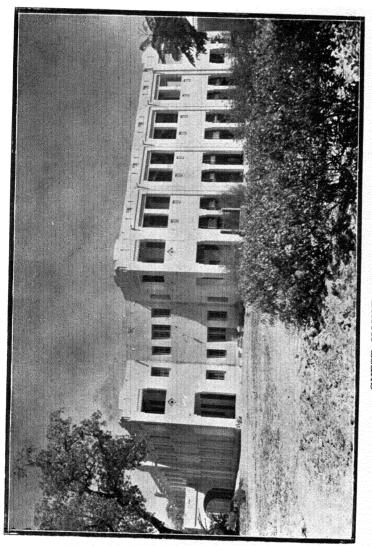
WOMEN STUDENTS' HOSTEL



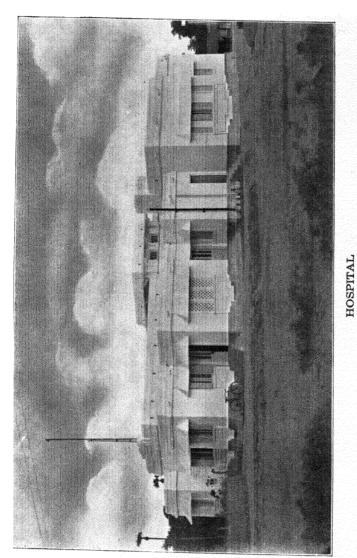
THE PARK AND THE BANDSTAND

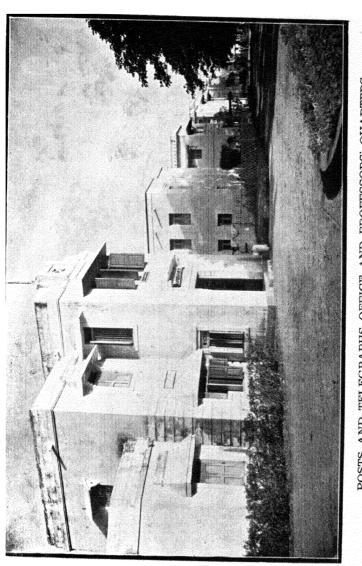


SPORTS PAVILLION

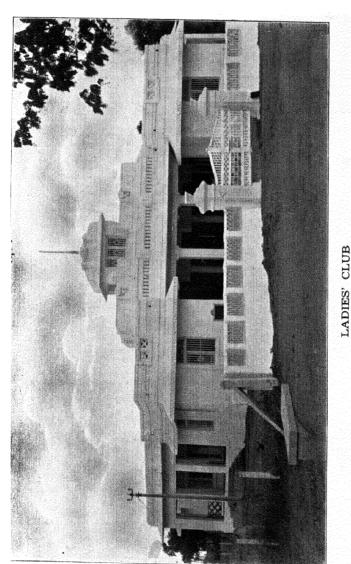


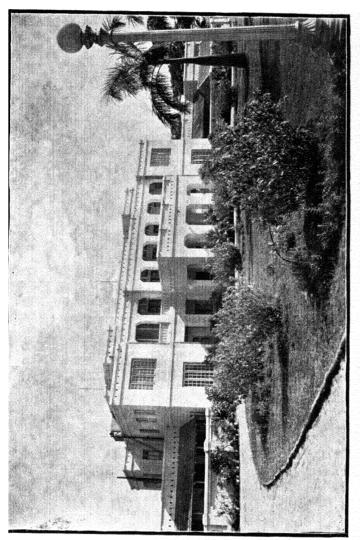
GUEST HOUSE AND STAFF CLUB





POSTS AND TELEGRAPHS OFFICE AND PROFESSORS' QUARTERS





VICE-CHANCELLOR'S BUNGALOW

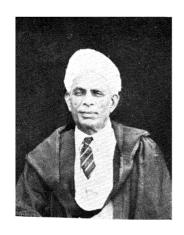
ACTING VICE-CHANCELLORS



1



2

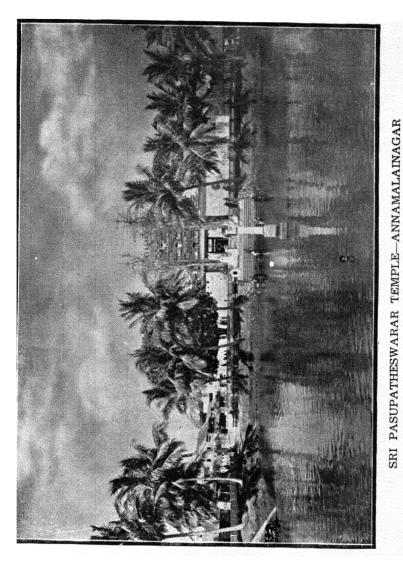


3



4

- 1. PROF. K M. KHADYE, 1931 (May-August)
- 2. DR. S. N. CHAKRAVARTI 1935 (May-June)
- 3 MR T R VENKATARAMA SASTRIAR (December 1936 to January 1937; 1939 January)
- 4. DR. B. V. NARAYANASWAMY NAIDU 1939 (March-April)



tive Council. Living in close proximity to the lecture halls and the huge University Library a student in this University can consult without the least trouble any of his teachers about the books he should read, get his doubts cleared and receive instruction in any other matter in which he is interested. He need not travel long distances to meet his teachers; they are at his door ready to be consulted whenever any doubt or difficulty arises.

The women students have a well-equipped hostel of their own under a resident lady Warden. In recent years more and more women students have joined the University especially for the study of Music. Some have taken up advanced courses of study in Arts and Science.

The capacity for organisation and leadership finds play in the largely self-governing University Union and in various other Sectional Societies. A Union Hall has been built at a cost of Rs. 15,000. The University has also a Dramatic Club, a Boating Club and a Students' Co-operative Society.

The University possesses one of the most extensive play grounds in South India and provision is made for all types of games and sports. In this University, Physical Training is compulsory for all students and no one can take a University Examination without producing a Certificate of Physical training from the University Director of Physical Education. Particular care is taken of the health of the students. There is a Resident Medical Officer who periodically examines the students. A well-equipped hospital with upto-date arrangements has also been provided.

Ever since its inception the University has emphasised teaching as well as research. In addition to the Research Journal, published three times every year, the University has to its credit a large number of learned publications. Studentships and fellowships have also been instituted for the promotion of advanced research. The departments of study are organized not merely for teaching but also for advanced research. Advantage has been taken of these facilities by students and by members of the teaching staff who have contributed many papers to learned journals.

Grants-in-Aid of research work are also awarded under certain conditions. With a view to providing for the advancement of learning in Tamil a special research department is working under the guidance of the Head of the Department of Tamil. With a view to the ultimate adoption of Tamil as the medium of instruction in the University the syndicate instituted prizes for text-books in Tamil on various subjects. So far books in Tamil on Logic, Physics and Chemistry have been published. A Tamil work on Music selected for the award of a prize of Rs. 750 will be published shortly. The Heads of Departments of studies in History, Economics, Mathematics, Botany and Zoology have been requested to arrange for getting ready Tamil text-books in the several optional subjects suitable for use in the Intermediate classes. These are expected to be published by the end of the year 1941.

Any casual visitor to Annamalainagar will be struck by the pulsating life of this centre of cultural activity. Any day of the week he will see in the evening hundreds of young men lustily playing in the open air Cricket, Tennis or Hockey or any one of the games popular with the youth of this country. Or he may see them sitting and silently pouring over books or periodicals in the spacious Reading Rooms of the University Library. Yet again he may see a scholar reading a learned paper before an advanced Study Circle of

kindred spirits; or see him going out Scouting or on Social Service work. Perhaps he may light upon a Music performance given by one of the foremost exponents of Carnatic Music; or listen in to the Radio or spend a few minutes reading a daily newspaper or current weekly. If he is more lucky he may see the whole University professors, lecturers, students and townsmen gathered in the Srinivasa Sastri Hall listening to a learned discourse on some topic of importance.

Barring the Travancore University, the Annamalai University is the youngest in the Indian Empire. During the first decade of its existence it has served South India as a true centre of Indian culture and as an ideal training ground for the young men and women of this land. We cannot be sufficiently grateful to the Rajah of Chettinad for founding this magnificent institution which is unique in our country.

We cannot all found Universities; but every one of us can do our bit to strengthen and encourage centres of learning like the Annamalai University.

SUCCESSION LIST.

CHANCELLORS.

- 1929. The Rt. Hon'ble Viscount Goschen of Hawkhurst, G.C.S.I., G.C.I.E., C.B.E.
- 1929. July to December—The Hon'ble Sir Norman Edward Marjoribanks, C.B.E., G.C.I.E.

 The Rt. Hon'ble Sir George Frederic Stanley, P.C., G.C.S.I., G.S.I.E., C.M.G.
- 1934. May to August—The Hon'ble Sir Muhammad Usman, K.C.I.E., B.A.
 His Excellency Lord Erskine, G.C.S.I.

- 1936. June—The Hon'ble Sir K. V. Reddy Kt., B.A., B.L. His Excellency Lord Erskine, G.C.S.I.
- 1939. The Hon'ble Sir Arthur Oswald James Hope, G.C.I.E., M.C.

Pro-Chancellor.

1929. Dr. Rajah Sir S. Rm. M. Annamalai Chettiar of Chettinad, LL.D.

VICE-CHĀNCELLORS.

- 1929. The Rt. Hon'ble V. S. Srinivasa Sastriar, P.C. C.H., LL.D.
- 1929. Diwan Bahadur S. E. Runganadhan, M.A., I.E.S.
- 1931. May-Aug.—K. M. Khadye, Esq., M.A., (Bomb.), B.A. (Cantab), Officiating.
- 1931. Diwan Bahadur S. E. Runganadhan, M.A., I.E.S.
- 1935. May-June—Dr. S. N. Chakravarti, M.Sc., D.Phil., (Oxon), Officiating.
- 1935. The Rt. Hon'ble V. S. Srinivasa Sastriar, P.C., C.H., LL.D.
- 1936. Dec. to Feb. 1937—Sri T. R. Venkatarama Sastriar, C.I.E., B.A., B.L., Officiating.
- 1937. The Rt. Hon'ble V. S. Srinivasa Sastriar, P.C., C.H., LL.D.
- 1939. March-April—Dr. B. V. Narayanaswami Nayudu, M.A., Ph.D., B.Com., Bar-at-Law, Officiating. The Rt. Hon'ble V. S. Srinivasa Sastriar, P.C., C.H., LL.D.
- 1940. Rai Bahadur Dr. Sir Kurma Venkata Reddy Nayudu Garu, K.C.I.E., D.Litt., M.L.C.

Members who have delivered Convocation Addresses.

- 1931. Diwan Bahadur S. E. Runganadhan, M.A., I.E.S.
- 1932. R. Littlehailes, Esq., M.A., C.I.E.
- 1933. Diwan Bahadur Sir T. Desikachariar, Kt., B.A., B.L.
- 1934. Diwan Bahadur R. V. Krishna Ayyar, B.A., B.L.
- 1935. Sir Mirza Ismail, Kt.
- 1936. Sir Phiroze C. Sethna, Kt.
- 1937. The Rt. Hon'ble V. S. Srinivasa Sastriar P.C., C.H., LL.D.
- 1938. Sri K. Natarajan, B.A.
- 1939. H. C. Papworth, Esq., M.A., I.E.S.
- 1940. The Hon'ble Sir Lionel Leach, Kt.

PAPERS ENGLISH

BIHARI

Bv

PANDIT AMARANATHA JHA, M.A., Vice-Chancellor, Allahabad University.

Both on personal and public grounds I am glad to send these few lines, as a I am hereby enabled to pay my tribute to an old friend of my father's, whose benefactions, magnificent alike in magnitude and in piety, make him one of the outstanding figures in modern India. Believing in the essential unity of Indian culture, I propose to translate some verses of a Hindi poet of the seventeenth century—short flights of fancy, pretty vignettes, which, because of the oneness of Indian tradition, will not be difficult of appreciation even by readers in the South.

Traditionally, Bihari wrote a Satsai, a collection of seven hundred verses. They are divided into four sections. Nayaka-nayikavarnana (Description of the Hero and the Heroine); Shringaravarnana (Description of the Erotic Sentiment); Shikha-nakha-ritu-varnana (Description of the Figure Heroine of the and ofthe Seasons): and Anyokti-Navarasa-Nripastuti-Varnana (Description of the Nine Sentiments and of the Monarch). The classification follows in the main the lines prescribed in the Sanskrit works, Dasharupa and Schityadarpana. The verses centre round the eternally young and fresh figures of Radha and Krishna, but they are capable of universal application.

The Doha is a couplet and there is the same epigrammatic effect in it as in the heroic couplet in English. It de-

mands compression and brevity. It forces the poet to eschew unnecessary decoration. Each couplet is complete in itself and yet through hundreds of them there is a continuity of thought and harmony of atmosphere. Moods vary and emotions alter; but the underlying unity is not disturbed.

- (263) My eyes are no more in my power: I am tired of explaining matters to them. They laugh at me, having obtained control over my mind and body. How, then, can I have power over them?
- (267) Himself full of beauty, from top to toe, he yet solicits me, smiling; truly, the covetous never abandon their greed.
- (268) "Fie, you care not for your reputation. Why do you keep gazing at Krishna."?
 "But what can I do to these covetous eyes of mine?
 What can I do to get rid of them?"
- (270) The Creator has not destined any happiness for these wretched eyes of mine. They dare not look at Krishna, because others are looking on, and they are restless without looking at him.
- (276) How can one dwell, how can one exist in the domain of Love? There is no justice there: the eyes come into clash, but it is the heart that is taken prisoner.
- (277) Fierce is the intoxication of beauty; terror does not drive it away; it permits no sleep; the passage of time does not diminish it; it is not followed by the recovery of consciousness.
- (278) Krishna's eyes rob me of my heart and of all my possessions. They waylay the wary and steal from those who are awake.

- (280) I have made countless attempts; I have tried again and again, but I cannot extricate myself from Krishna's charms. My mind is mingled with his beauty, as completely as salt with water.
- (284) The new love on the one side and consideration for the good name of her family on the other—between the two she was torn, and perplexed, and her mind is like the windmill.
- (285) She ascends to the roof of the house and quickly comes down from it; she keep doing this without feeling exhausted in the least; she has become like unto a juggler's box.
- (286) To and fro, and to and fro, she keeps moving, stopping nowhere even for a while; she keeps flitting backwards and forwards like the chakai bird.
- (287) "My mind is engrossed with thoughts of him who has stolen my heart, and I have at the same time intense regard for my elders. I go on doing my household work, but my heart is as though on a swing."

THE FETISH OF APPLIED SCIENCE.

By

DR. S. V. ANANTAKRISHNAN, M.A., PH.D. (LOND)., A.I.C.

The origin of Science may be traced to that instinct in man that led to his acquisition of knowledge about Nature in order to survive. The need for food and the warding off of the attacks of animals led to the developments of primitive agriculture and primitive tools and weapons. From these beginnings to the scientific achievements of the twentieth century is a far cry and it is not our purpose here to trace historically this development.

One of the catchwords among politicians, especially in this country-and we hear their cry in our academic bodies too-is that research workers should devote their attention to problems in "applied science" rather than to "pure science." The fundamental mistakes made by these are the assumption that the two regions are water-tight compartments and the failure to realise that many of the socalled "applied science" problems arise only in the actual working of industries. A careful examination of the socalled applied sciences shows the extent of their dependence on the theoretical side. At the end of a Friday evening discourse at the Royal Institution, an old lady asked the lecturer Faraday as to the use of electricity and the scientist retorted "of what use, madam, is the new-born babe." Scientific outlook has not materially altered since then.

Scientific research may be broadly classified on the basis of the motives behind the work. To one class the dis-

covery and acquisition of new knowledge is the end while the other centres round utility. The transition from one to the other, however, is not a forbidden one. A large volume of scientific knowledge is useful though only a small fraction of it may be essential.

The close interrelationship between pure and applied science, between scientific discovery and invention, may be seen from an examination of a few select instances. Achievements in the latter field are often, however, a result of the exercise of mechanical ingenuity rather than a spirit of inquiry which should form the background of scientific research.

When Sir William Crookes uttered his warning on the possible shortage of nitrogenous fertilisers, several workers set on the problem but the final result of a successful fixation of atmospheric nitrogen could be achieved only when the theoretical side of each reaction was thoroughy worked out. The Birkeland Eyde process is a result of the thermodynamic and kinetic studies on the Nitrogen-oxygen reaction, while the Haber process of ammonia manufacture was preceded by a systematic investigation on heterogeneous catalysis and the nitrogen-hydrogen reaction. It is again the investigations of G. N. Lewis on the thermodynamics of the Ammonium Carbamate-urea equilibrium arising from the free energy change studies on the reaction $CO_2 + 2NH_3 \longleftrightarrow CO(NH_2)_2 + 2H_2O$ that has led to the manufacture of urea which is now gradually displacing other nitrogenous fertilisers.

The chemistry of colloids also reveals how the two aspects of scientific research cannot be dissociated. The present state of the petroleum industry, the textile industry and paint and varnish industry, is to be traced to the theo-

retical investigations of Carothers, Bancroit, Langmur, Gardner in America, of Clayton, Donnan, McBain etc., in England and of Freundlich, Mark, Zsigmondy etc. in Germany.

The dehumanizing aspect of applied research is seen best in modern warrare. Scheele discovered chloring in 1714 and Davy established its elementary nature some thirty years later. The use of its bleaching properties as well as the manufacture of bleaching powder is now known for nearly a century and a hard but its use as an antinuman weapon in the form of poison gas is recent history. Another of Scheele's discoveries, glycerol, tens a similar story. It was a laboratory curiosity until Affred Nobel's discovery of nitro-glycerine in 1883. The explosive properties and wartime use of this compound are too well-known to need any special mention.

Every one is lamiliar with radio-communication and broadcasting but tew realise the beginning of these modern "necessities." Haraday discovered the principles relating to the nature and influence of the electromagnetic field and Clerk Maxwell's equations based on these enabled the proof that waves originating from conducting wires travel with the same velocity as light. The work of Fitzgerald, Oliver Lodge and Hertz were the logical outcome of these purely mathematical conceptions and gave them a physical reality.

Another development in pure science has, however, to precede the use of these electromagnetic waves for long distance transmission. The researches on "thermionic emission" form a necessary link in the chain. The "Edison Effect", the two electrode valve of Fleming, the triodes and pentodes of a later period and the theory and use of those

for generating and detecting continuous electric waves represent an important stage in the development of broadcasting. The promotion of natural knowledge has given place to purposeful invention. Here, too, we see the dehumanizing application of scientific research in some of the methods adopted in present day warfare.

Turning to another common industry, the electric lamp, we are faced again with an inter-woven texture of discovery and invention. These have become so common that one is apt to forget the early history as an outcome of purely scientific search. The observation that the passage of a current through a conductor raises its temperature sufficiently to even enable it to glow led to the carbon filament lamp but the peculiar property of carbon, viz., a decreased resistance with increasing temperature, set limitations that necessitated the search for a substitute. As is well known, a rise of temperature tends to increase the speed of a chemical reaction and the high temperatures necessary for light emission restricted the choice to metals of high melting point and to an inert atmosphere for the filament. The vacuum lamp with a platinum filament is a result of investigations on high vacua and the chemistry of the platinum group of metals.

It is a far cry from the discovery of tungstic acid and tungsten by Scheele to the thoriated tungsten, coiled coil gas filled lamp of the present day. The properties of tungsten apart from its high melting point were against its wide use in the beginning. The discovery of ductile tungsten was of highly scientific importance and proved to be an equally important scientific invention. The theoretical investigations of Langmuir on heterogeneous catalysis and black body radiation, his extension of phase rule to non-equilibrium systems and his work on thermionic

emission paved the way for the development of the thoriated tungsten and the coiled coil lamps.

Accurate gas density determinations by Lord Rayleigh and the work of Dewar on heat transmission that led to the familiar Dewar flask enabled Ramsay to discover the inert gases. This discovery was of considerable theoretical interest and the post war period was to show its industrial import. The inert nature of the gases led to the choice of argon and krypton as suitable atmospheres for the gas filled lamp and in Neon provided advertisers with a means for a striking coloured sign. The invention of the electric discharge lamp and the production of these multi-coloured signs have their origin in the theoretical investigations of Crookes, J. J. Thomson and others on the discharge of electricity through gases and the more recent investigations on the phenomena of fluorescence and phosphorescence.

Another modern necessity, the refrigerator, also illustrates the transition from discovery to invention. It is in the investigations of Amagat, and Van der Waals on the pressure volume relationship and critical state of gases and vapours and in the classical "porous-plug" experiment of Thomson that one has to look for the beginnings of refrigeration. The foundation for the liquefaction of gases was laid by Faraday and the application of the Joule-Thomson effect enabled the development and use of liquefied gases.

When considering applied science, one cannot lose sight of work in the "border" sciences where investigations in several sciences find common ground. Reference may be made here to medicine, and its adjuncts. The work of Louis Pasteur on optical activity led him to a study of

fermentation phenomena and bacteriology that has immortalized his name all over the world by the work associated with Pasteur Institutes. It is no exaggeration to state that every outstanding discovery in the field of biochemistry and medicine has its origin in the quest for truth by disinterested workers. One has only to look into the history of X-ray therapy, radium therapy, chemotherapy and of studies on nutrition to see the close correlation of pure and applied science. The discovery and identification of the vitamins and the synthesis of some of them constitute a triumph in the search of new knowledge as much as in their practical applications.

The preceding paragraphs would have given sufficient indication that the political propaganda against work in pure science is baseless. One has only to glance through the publications of research laboratories of large industrial concerns to know the extent of fundamental work that is being carried on there in addition to work directly connected with the industry. In the ideal state, research may be carried on without any objective reward but the normal work is not so absolutely selfless. The seeker after knowledge aims at honour and academic distinctions while the inventor looks for a financial return for his labour and ingenuity. This leads us to the question of the existence and maintenance of research laboratories. A modern laboratory cannot exist or survive without an adequate subsidy. Most laboratories now functioning are either maintained by Governments or are subsidized by industrial combines. The financial interests, however, often tend to cramp the research workers' activities and freedom of thought. The extent to which vested interests thwart the spirit of inquiry varies with the country and the Institution. While not forgetting their objective, the

Bureau of Standards in Washington and the D.S.I.R. in its Teddington Laboratories carry on a lot of fundamental work but in this country we have to tell a different story. Industrial laboratories maintained by leading concerns fundamental research with disfavour. While increased industrialization is a necessary development, it is a short-sighted policy to decry those workers who do not happen to carry on utilitarian research. They also serve a purpose in extending the bounds of knowledge. Understanding Nature is at least as important as using Nature and life may not be worth living if man had to deal with only useful things.

EDUCATIONAL RECONSTRUCTION

By

Dr. Anwar Iqbal Qureshi, M.A., M.Sc. (Lond.), Ph.D.,

Professor of Economics, Osmania University.

A system of education must be suited to the people for whom it is intended and there should be some consideration of the social and economic back-ground on which our system of education is to work. Unfortunately these two most fundamental concepts have been violently ignored in the present educational system of this country. In any scheme of educational reconstruction in this country the first and the most fundamental consideration should be that our educational institutions should have national outlook. In order to create this outlook the system of training should provide courses of instruction in that literature which contains the ideals of its race and all the nice proofs and subtle inspirations of the character, spirit and thoughts of the nation which it serves; and, besides that, instruction in the history and leading conceptions of those institutions which play an important role in the life of the In order to achieve this important ideal special nation. stress should be laid on the study of Indian culture and Indian History. The history books that are taught in our schools and universities give most misleading and hopeless accounts of events and leading character of our nation. They have already created enough mischief and without the least possible delay all efforts must be devoted to eradicate this evil and suitable text books should be prepared

to give an honest and sympathetic account of our past culture and heritage. Our universities could and should do a good deal to achieve this end. It is the object of learning not only to satisfy the curiosity and to perfect the spirit of individual men but also to advance civilization; and, if it be true, that each nation plays its special part in furthering the common advancement then every people should use its universities to perfect it in its proper role.

Woodrow Wilson has rightly remarked that, "Every man sent out from a university should be a man of his nation as well as a man of his time." In any scheme of reorganisation of education of this country this ideal should occupy a very important place.

Primary Education: -To begin from the very beginning our schools must be organised on sound modern lines to provide real education not only to the classes but to the It should be the first obligation on the masses as well. State to provide every citizen male and female with free primary education. The expenditure required for providing free universal education must be the first charge on our national exchequer. In this connection I would like to explain what I mean by free primary education. A good deal of nonsense and loose-talk has been going on in this country about the primary education and it is debated whether it should be a four years course or a five years course. Even if we accept a five years course it means that a child going to school at the age of five will finish with his free education at the age of ten. To my mind the idea of a free universal education finishing at the tender age of ten is most absurd and fantastic. In no country of the world such an absurd idea has ever been entertained. The average minimum age up to which free education is given in most countries is fourteen years which in itself is considered very inadequate. All money that will be spent on free compulsory education based on a course of five years will be absolute waste. Even in the interest of economy itself it is highly desirable that in no scheme of free primary education in India the course of instruction should be less than eight years.

Broadcasting and Education:—The development of broadcasting in India has opened many new possibilities for educational reconstruction. Broadcasting is still in its infancy in this country but still the possibilities of fully developing it are immense. Some stations in India have already started this experiment and many of their broadcasts for schools have been well deviced and of great interest and use. I propose that a separate department of education should be created by the All-India Radio and increasing use should be made of this modern educational instrument especially for the education of adults.

Cinema and Education:—The development of television is likely to provide still further facilities for the increasing use of the radio for educational purposes but until its further development increasing use should be made of Cinemas. Educational films should be prepared especially for teaching Geography and other allied subjects.

Vocational Education:—The second most important problem to be considered in any scheme of educational reconstruction is the need for the expansion of vocational education. India is rapidly developing into a vast industrial country and there is increasing need of skilled and trained labour. No country can develop its trade and industry without skilled artizans, therefore, the need for vocational education in all its aspects is most urgent.

Effective machinery should be established for securing close regular co-operation between industry and commerce, on the one hand and education on the other.

Vocational Guidance: - In any system of mass education vocational guidance must assume special importance. A swiftly changing economic and social world has made demand upon educational procedures for adjust-Education the individual. needs of the ment to through the discovery and development of individual ability prepares him for his life; and the child's vocational guidance prepares him for living well; and both yield him the maximum of satisfaction. Vocational guidance should assist the individual to choose an occupation, prepare for it, enter upon it and progress in it. As preparation for an occupation involves decisions in the choice of studies, choice of curriculums, and the choice of schools and colleges, it becomes evident that vocational guidance cannot be separated from educational guidance. Since work occupies one half of the working time of most individuals, it should represent the active expression of the whole personality. In view of this important function, careful study must be made of all the problems involved in vocational activity. Proper vocational adjustment for each citizen not only means individual happiness but avoids social and economic waste. The underlined principles which should govern vocational guidance activities should be based upon the recognition of individual preferences, of the complexity of modern educational life, of the right of the individual to make his own choices, and upon the realization that the adjustment of an individual to his occupation is an ever changing situation.

Effects of Economic Depression on Education: —Whatever hardships and privations the last Great Depression

may have caused all the world over, it has done one good service, and that is, it has made us all to face and examine critically the various important problems which were previously ipso facto taken for granted. One of these problems is the problem of university education. economic depression set in, and the large number of graduates which our universities were minting rapidly found themselves without jobs, and the problem of unemployment among educated classes took a serious turn, little attention was devoted in India to the universities and their problems. All that mattered in the pre-depression period was, that the number of universities should be increased, and considering that the number of universities jumped from five in 1916 to sixteen in 1927, an increase of three hundred per cent. in the course of eleven years, the record of progress seems to be very satisfactory indeed. The universities that were established before 1916 were mainly based on the model of the London University, and were only examining bodies. The Calcutta University Commission of 1916 recommended strongly the desirability of starting unitary and residential universities and as a result, the majority of universities that have been founded since that date are residential and teaching universities. establishment of so many residential universities on the model of the Oxford and Cambridge universities satisfied the Indian critics who had previously been dissatisfied by the older examining universities. It was considered that the establishment of residential universities had almost solved the fundamental problems of Indian education and all that was necessary was to improve the quality of teaching and emphasise the importance of tutorial work and to increase the contact of the students with the It was considered that in due course of time when the effects of these important improvements become

pronounced our problems will be solved. But during the past few years the ship of Indian education has not sailed as smoothly as it was expected and many critics have begun to doubt if the very structure of the ship itself was strong enough to stand the stormy seas of world events. The tremendous rise in the number of unemployed young persons has led to the policy of despair and many superficial critics hold that the universities are responsible for many of the country's troubles. It is not realised that the universities are in no way responsible for unemployment which, on the other hand, is due to causes far beyond their control. Moreover, it is not the function of the universities to create avenues for employment. It is a very narrow view to take that if the number of people admitted to universities is drastically curtailed the possibilities of employing this restricted number will increase. The fundamental function of universities is not to act as an employment bureau but as a trainer of the mind and intellect of the future citizens and to bring out their latent faculties which may be used in any walk of life. It is an unfortunate fact that our universities are not centres for intellectual training, culture and enlightenment as they ought to be. Have our universities succeeded in mental development of students? It is on the answer to this question that our universities stand or fall. Unfortunately they are places for cramming and smattering, and there has been a serious maladjustment in the university life. Too much importance is attached to the literary and academic side and very little to the intellectual and cultural side. Much time is wasted by the professors on lecturing to students and by the students in cramming and digesting the contents of those lectures. We find that even in the field of knowledge an Indian student does not fare favourably with students of other universities. Why, in spite

of so much teaching by professors, and cramming by students do our students do so unfavourably? Surely there must be something wrong in our system of teaching which shows such poor results. I think the fundamental difficulty and defect in our system of university education is that we impart teaching through a foreign medium, which acts as a great deterrent to any substantial progress. It is gratifying to note that educational experts in the country have begun to realise this great defect which exists to-day in our universities; the only exception to which is the Osmania University established in 1919. It is the first university of its kind in India where all lecturing work is carried on through the medium of the primary vernacular of the country. Twenty years ago when Mr. Akbar Haydri as he then was (Sir Akbar Haydri, Newab Hayder Newaz Jung Bahadur, President of His Exalted Highness the Nizam's Executive Council, and the present Chancellor of the university), submitted a memorandum in which he propounded this great scheme of starting a university with the primary object of teaching through Urdu, there were not many experts in the country who received this idea with any great favour. As a matter of fact, some of the greatest experts considered it rather fantastic and altogether unworkable. It must be said to the credit of Sir Akbar that all these heavy showers of criticism that poured from all quarters did not affect him, and with great courage, foresight and enthusiasm he launched this great experiment which today is an accomplished fact, and all experts in the country are now looking to this university for guidance. will not be considered here out of place to reproduce briefly some of the remarks which the Vice-Chancellor of Andhra University made in his recent convocation address: "In pride and fullness of heart as an educationist, I congratulate the sovereign and his Government on the success

achieved by the Osmania University. The band of young, accomplished and enthusiastic teachers composing the different faculties are a team which the greatest educationists in India would be proud to captain. The researches accomplished and still in progress and the investigation in the theoretical and applied fields of Science including Zoology, Physics, Chemistry, Civil Engineering and History augur not merely an All India but an international future for the Osmania University. To be the first to recognise an Indian language as a fit medium for university culture and to have made the university founded on the principle a centre of modern research are accomplishments for which India must be eternally grateful to the Nizam's Dominions."

The primary function of the University, as I have already remarked, is to train the mind, but the training of mind can never be thorough if it has to employ a foreign vehicle of thought. English is not only a foreign language to most of us in India but is also "alien." By "alien" I mean that it has no connection with the tradition, culture and life of the East, and except in the big cities it is seldom spoken. A great deal of saving in time and improvement in the quality of the work can be effected if the teaching work in the Indian Universities is carried on through the medium of vernacular. One naturally asks through which vernacular, as there are so many languages in the country. The Indian National Congress has decided to adapt Hindustani as the lingua franca of the country, and I think if we rise above petty regional and provincial jealousies it will not be difficult for the country as a whole to adopt Hindustani as the chief medium of instruction in all our universities. I should not be misunderstood to belittle the importance of English in our universities. I firmly believe that a sound knowledge of English is absolutely essential if we are to benefit from the very valuable treasures of knowledge and learning of the West. It is with this idea in view that English has been made a compulsory second language and no student is awarded a degree unless he passes an examination of fairly high standard in English.

Medium of Instruction

Now I come to the most pertinent part of my paper, viz., the possibility of teaching in Urdu. Still there are many people who seriously doubt the possibility or at least the practicability of such a proposition. Before I proceed further to explain this matter, I would like to mention a few facts. Perhaps it may be recalled that it is not very long ago that History and Geography were taught in English in the Punjab schools and the matric students had to answer these papers in English. It is fortunate that wise council prevailed and the Punjab University decided to give option to the Matric students to answer questions in these two papers either in English or in any of the vernaculars. To some it appeared a very retrograde step. I feel no hesitation whatsoever in congratulating the authorities of the Punjab University for their very wise decision. We find to-day the standard of these answers has increased considerably and more than 90% of the students answer their questions in vernacular. What the Punjab University has done for History and Geography for the Matriculation, the Osmania University has done for all other classes. Now, some may say that there is a limit to everything. And the likely limit to most people seems the matriculation. would say so far and no more. This is the attitude of Calcutta and Madras Universities. The Agra University has gone a step further and would like to try up to the intermediate. In the Allahabad University candidates appearing for the M.A. examination in Economics have to write their

essays in easy Hindi or Urdu. I have given these examples just to show you the changing trend of opinion. What the Punjab University did for the Matriculation about twenty years ago, the Calcutta University is going to do now. The objections raised against the option in the Punjab University twenty years ago were repeated in the Calcutta University.

It is said that adequate literature is not available in the vernaculars. Also there will be immense difficulties regarding the technical terms, so on and so forth. I quite admit the force of the arguments. But something has to be done. We cannot afford to be mere spectators and watch our own intellectual ruin. Why is the intellectual standard of ordinary Indian graduate so low? In my opinion the real answer to this question is that he does not properly understand what he reads. He only crams and passes the examinations. Although I have admitted above that there are real difficulties regarding the availability of literature and the coining of terms yet these difficulties are vastly exaggerated. Take, for example, the teaching of classical languages. Why on earth a student has to translate these in English? I personally know the cases where students had passed the highest examination of the Punjab University in the classical languages but failed in the intermediate in the language paper, simply because their English was so weak that they could not translate the classical text into English.

When the Osmania University broke new ground and declared to base its teaching on Urdu, it was regarded as a most fantastic idea. But today we have showed the world how it could be done. The teaching and examining in all subjects from the intermediate to the Ph.D. standard is done in Urdu. The standard of answers of students is far higher as compared with the students of other universities.

I am firmly of the opinion that if teaching in Indian Universities is to improve it must be done in the vernaculars. In the course of twenty years we have coined thousands of terms and several hundred standard books have been translated into Urdu. If our example is followed by all other universities a tremendous amount of literature will be forthcoming in a short time. What Osmania has done, other universities too can do.

lus, Sophocles, and Euripedes, wrote tragedies (Eleusinian dramas) which were of a secret nature, because they were religious in plots. It is even said that on one occasion Aeschylus was accused of having let out an Eleusinian secret, and was released only on the intervention of his brother, who was a great warrior. Thus we see that the drama proper had its origin in religion in Greece.

In India, which justly claims to have an independent origin of the drama, we hear of the songs, some of which were accompanied with dances, in the most ancient times. Apart from the divine origin of music, dance and drama, we have the rhythmical hymns in the Vedas (e.g. Samaveda); and mention is made of the lasya or gentle dance of Parvati, the tandava or vehement dance of Rudra, etc. Dances formed a part of the celebrations in the most ancient sacrifices,—human, horse, goat,—one yielding its place to the next. Moreover, the Bharatanatya-sastra which is said to have been written in the fifth century B.C., contains a systematic record of canons on music, poetry, art, dance, and drama. Bhasa, one of the earliest dramatists as we have known, has selected most of his themes from the Ramayana and the Mahabharata. Kalidasa, (who lived between the first century B.C., and the fifth century A.D.) writes in his Malavikagnimitra.

" देवानामिदमामनन्ति मुनयः कान्तं ऋतुं चाक्षुषं "

(Sages say that the drama is a sacrifice to the gods, which is pleasing to the eye). This indicates that in those days, the Naramedha, the Asvamedha, and such other sacrifices were not considered to be pleasing to the eye; but that the drama, which is also a sacrifice (action) gives not only pleasure to the eye, but also pacification to the gods. We see here the religious origin of the drama in India.

India and Greece are the only two countries which are bestowed with the fortunes of having brought forth their native dramatic faculities, even in the most ancient times.

China is said to have had her alphabet even before the twentieth century B.C. The Chinese are noted for their excellence in the imitative faculty. They take pride in their "Book of Oods" which proves the existence of music and poetry prior to the twelfth century B.C. The Chinese are famous for their taste and native talents in music, but they had no regular dramas till the sixth century A.D. But, even in those days when they had dramas not known to the historian, the Chinese are said to have celebrated every function with a dramatic performance—functions such as the promotion in the salary of an officer, the marriage of a middle class man, and the birth of a child.

In Italy, we hear about the songs and dances of the Talics in the eighth century B.C., at a time when Greece was enjoying her Mystic dramas, and India her Sacrificial performances. All these performances had for their ultimate object, the elevation of the soul and consequent sublimity. Again we see the religious aim in the ancient drama. After the Punic Wars which were fought in the third century B.C. Italy came into close contact with Greece; by which the influence of the Greek drama spread on to Italy. The Greek prisoners in Italy were given privileges to exhibit their talents in dramatic action, and it is also known that some of those who fascinated the public by such talents were released, and were allowed to enjoy free-citizenship.

France, Spain, and Great Britain have their records of their dramas from the eleventh century A.D., but even before that time, there were, no doubt, folk songs in France and Spain, and Saxon dances in Britain. It is only after the influence of Latin literature over Britain that she began to have her regular dramas. The other countries of Europe had their languages perfected even at a later date. The eleventh and the twelfth centuries brought manifold changes in the history of many countries in the world. Every country had her dialect perfected, her government systematised, and her art and culture dignified.

It is now seen clearly that the origin of the earliest drama was only religious as far as the theme is concerned, with very few exceptions, of which the *Mricchakatika* is one. After the twelfth century A.D. the drama took different shapes by taking in themes from the social, political and historical fields.

CERA NADU AND TAMIL

By

VIDVAN S. ARUMUGA MUDALIYAR, M.A., B.O.L., L.T., Government College, Coimbatore.

For the elucidation of the history of the Kerala country just before and during the three centuries of the Christian era, we have no epigraphical, archaeological or even literary evidences in Malayalam. The 'Keralotpatti' is regarded as the oldest available account of Kerala, but this belongs to the 17th century A.D., and is further, as Logan observes, "a farrago of legendary nonsense which had for its aim the exaltation of the Brahman caste and influence." The late lamented K. G. Sesha Aiyar similarly observes that "to gleam history from this work is as hopeless as to seek for a needle in a hay-stack." The Keralotpatti says that Kerala arose at Parasurama's Command from the seas. This means that, as P. Padmanabha Menon² suggests, the country covered by Malabar, Travancore and Cochin, was formed by volcanic agencies on this coast centuries ago; "that there was once a subsidence, probably sudden, at Gokarnam; and secondly that there was afterwards a perceptible uprising, most probably in this case gradual, of at least some portion if not nearly all the coast between Gokarnam and the Cape." This view has received confirmation from the investigations of the Geological Survey of India.3

- 1. 'Chera Kings of the Sangam Period,' p. 78.
- 2. 'History of Kerala,' Vol. 1, pp. 19 and 20 of the notes.
- 3. Memoirs of the Geological Survey of India, Vol. XXIV, part III, p. 35.

Mr. Philip Lake shows that South Malabar between Beypore and Ponnani rivers was the result of such upheaval.

The chronicle then gives some traditions which are too hazy to be taken as History. According to it a period of indigenous kings, who were generally incompetent was followed by a period of kings selected from the neighbouring countries on the understanding that each was to rule for twelve years. The earliest of them is said to be one Keya Perumal, and after him were brought a succession of Chola, 'Pandi,' Kerala, Tulubha' Indra and Arya Perumals, and others. Historians can see in this only this much, that "the author has heard of invasions of Kerala by some Pandya, Chola⁴ and other neighbouring kings or chiefs who probably retired to their territories after their raid and from that he wove his fanciful list of Perumals brought by the people into Kerala."

There is another work called the "Kerala-mahatmyam" which is in Sanskrit and which is allied to the work mentioned above. But it is even later, and, as pointed out by C. Achyuta Menon⁵ and C. A. Innes,⁶ so full of inconsistencies, anachronisms and absurdities that it is difficult to separate from the chaff what few grains of truth they contain.

In the absence of epigraphic and archaeological evidences, we are lucky in having literary sources of information in regard to this period of Malayalam History. These consist of (1) the Tamil classics of the Sangam period, and (2) the Greek and Roman writers like Ptolemy, Pliny and the author of the Periplus of the Erithrean Seas.

^{4.} See 1.

^{5. &#}x27;Cochin State Manual,' Ch. II, p. 29.

^{6.} Malabar District Gazetter, Vol. II.

The Tamils, of all the Dravidian nations, cultivated and preserved the earliest literature of continuous development and unique historical value. Among these works we find three distinct classes, viz., the naturalistic, ethical and religious. The value of the first type, in particular, cannot be over-estimated, though even here much caution is necessary in sifting and arranging the available material. On the whole, we have in them faithful records of the political, social, literary and religious conditions of Malabar during the Sangam Period. Previous to the era of dated inscriptions, they are the earliest sources for the construction of South Indian History. The most important works among the Tamil classics that throw light on ancient Kerala are the Purananuru, the Padirrupattu, and the Silappadikaram, besides a few lyrics of the Agananuru and the Narrinai. We understand that the land, bounded on the east by the Western Ghats and the west by the sea, was called in the early Tamil works, the Cera-nadu (சோநாடு), and the kings of the country Ceran, Ceraman or Ceralan (சேரன், சேரமான், சேரலன்). From very early times, Tamilakam was ruled by the three crowned kings, (முடியுடை மன்னர்) Cera, Cola and Pandiya. The Tolkappiyam the famous Tamil grammar and the oldest extant Tamil work, refers, in one of its7 Sutrams, to the Tamil country as one belonging to 'the famous three within the four boundaries.' The Commentator Perasiriyar enumerates the four boundaries as Venkadam (Tirupati hills) in the north, Kumari on the south, and the seas on the east and the west. The Kumari mentioned here, it must be known, is not the present Cape Comorin, but the name of a river of the same name in the southern Tamil continent, the Kumarikandam, which was known to the early Tamil works and which was submerged

^{7.} Tolkappiyam, Poruladikaram, Seyyuliyal, No. 79.

later on. Panambaranar, the class-mate of Tolkappiyar, has written a preface to the Tolkappiyam, wherein he refers to the northern and southern boundaries of Tamilakam. The commentator8 Nachchinarkkiniyar explains the absence of the mention of the boundaries on the east and west on the ground that they were the seas. In those early days Cera country was part and parcel of Tamilakam. Tradition handed over from ancient days says that the Cera-Cola-Pandivar were the rulers of the land from time immemorial. The famous commentator of the Tirukkural explaining the phrase Palankudi (பழங் குடி) ancient family, occuring in the chapter entitled Kudimai (குடிமை), says that it was as old and great even as the three royal families of Cera, Cola and Pandiya, which could be traced to the beginning of creation (படைப்புகாலர் தொடங்கி பேம்பட்டு வருதல்). Evidently the phrase "படைப்புக் காலந்தொடங்கி" is an exaggeration. We may take it to mean from very early times. To quote some more instances to prove that was prevalent up to the west coast, we may refer to the two following Sutrams of Sikandiyar and Kakkaipadiniyar respectively.

- வேங்கடம் குமரி தீம்புனற் பௌவமென் றிர் ரான்கெல்ல தமிழது வழக்கே".
- வடக்குர் தெற்குங் குடக்கும் குணக்கும் வேங்கடங் குமரி தீம்புனற் பௌவமென் றர்ரான் கெல்லே யகவயிற் கிடர்து??

These Sutrams refer to the east and the west boundaries of Tamilakam as "Guarauic" or the sea. It is interesting to note that the Cera⁹ author of the Silappadikaram too,

- 8. Tolkappiyam, Eluttatikaram, Naccinarkkiniyar commentary, p. 8. S.I.S.S.W.P. Society edition.
 - 9. Silappadikaram, VIII, ll. 1-2.

while enumerating the boundaries of Tamilakam, leaves out the west and the east for the same reason pointed out by the commentator of Tolkappiyam.

The ancient Cera country is referred to in Sanskrit works as Kerala, and that seems to be the name by which the Malayalis love to call their native land. P. T. Srinivasa Aiyangar¹⁰ says that the name of this country occurs in the original form of Cera itself in the Taittiriya Aranyaka as Cera-padah, and he cites the authority of Prof. A. B. Keith for constructing the expression to the Ceras. But this is doubtful, as Sayana takes Cera to mean snake.

Katyayana (first half of the 4th century B.C.) and Patanjali (B.C. 150) make mention of Cera, though Panini (7th century B.C. if not earlier) does not. The Mahabharata, the Ramayana, the Vayu-purana, the Matsya and Markandeyapuranas mention Kerala and Gokarnam. The second and 13th edicts of the great Buddhist emperor Asoka refer to the ruler of Kerala as Keralaputra and class this country as one of the border-lands (Pratyantas) of his empire.

Since the Cera country formed the western portion of Tamilakam, the Cera king is described in the Tamil classics as the ruler of the western country. The epithet, "Kudapulam kaval"—maruman literally meaning "one who came in the line of kings protecting the western country," (குட்புலம் காலல்மருமான்) is used for the Cera king by the author of the Sirupanarruopadai, a Sangam work; and he describes the Pandya and Chola respectively as the kings of the southern and eastern countries. Since the western

^{10.} History of the Tamils, p. 29.

country is mountainous, the Chera king was also known as Malaiyan (மஃயன்).

Apart from the big geographical divisions, Tamila-kam was divided into two divisions from the view-point of the purity of the language spoken therein. The one was Sen Tamil Nadu (area where good Tamil was spoken), and the other Kodun-Tamil Nadu (tract where bad Tamil was spoken). Madura, which was the seat of the Third Tamil Sangam, and its surrounding parts were the Sen-Tamil-Nadu, and under the Kodun-Tamil Nadu are included twelve districts, which Senavarayar and Nachchinark-kiniyar, commentators of the *Tolkappiyam*, name in the following order from the south-east to the north east of Sentamil Nadu—Ponkar, Oli, Tenpandi, Kuttam, Kudam, Panri, Karka, Sitam, Puli, Malaiyamanadu, Aruva and Aruva—Vadatalai.

The commentator of the Yapparunkalam gives the same list with this difference, that instead of Ponkar and Oli, he has Ven and Punal. Kanakasabhai Pillai¹¹ too accepts this view, and gives a map setting forth the four Koduntamil Nadus or Provinces bordering on the Arabian Sea in the following order from north to south. Puli Nadu, Kuda Nadu, and Venadu. The names were appropriately given to each province, as they noted its peculiarity. 'Puli' or the 'Sandy tract' extended most probably from the banks of the modern Agalapula to the mouth of the Ponnani river. The soil of this part of the country is remarkably sandy. Kudam or the "western land" denoted apparently the region between the mouth of Ponnani river and the southernmost mouth of the Perivar near

^{11.} The Tamils 1800 years ago facing, p. 14.

Ernakulam. This would have been the most western land to the first immigrants who came into Malabar by the Palghat Pass.

Kuttam or the land of lakes comprised the territory around the modern towns of Kottayam and Quilon, which is to-day known by the same name to the natives of the country. The river Pali or Palai, which flows through this province formed at its mouth several islands and lakes, and hence this tract was called Kuttam¹² or "the land of lakes." To the south of this province, lay the Venadu which comprised the major portion of Travancore.

Even to-day the Maharajah of Travancore is known as "Venattadigal Tiruvadigal." The low hills and valleys in this region were covered with luxurous forests of bamboo, and therefore it was aptly called Ven-Nadu or the "bamboo land." The Chera, being the overlord of these provinces, was also known after them, Puliyan, Kudavan and Kuttuvan.

The above mentioned five provinces formed the ancient Chera country, the capital of which was Vanji or Karur. It was situated on the banks of the Periyar. Adiyarkkunallar, the commentator of the *Silappadikaram*, identifies this Karur with Tiruvanjaikkulam, but Kanakasabhai Pillai identifies it with Tirukarur three miles from Kothaimangalam and 28 miles east by north of Cochin, where the remains of an old temple and other massive buildings are still visible. Pandit R. Raghava Aiyangar

^{12.} Cera Kings of the Sangam period, chapter VI.

^{13.} The Tamils 18 hundred years ago, p. 15.

^{14.} Journal of the Asiatic Society, Vol. II, p. 336; Sewell's lists of Antiquities, Vol. II, p. 261.

discusses this question very elaborately in his "Vanjimanagar," and arrives at the conclusion, and Pandit M. Raghava Aiyangar in his "Cheran Senguttuvan" agrees with him, that Vanji, the ancient capital of the Cheras, is neither of these places, but Karur in ancient Kongu. or modern Trichinopoly District.

The western geographer of the first century A.D., Pliny, who refers to the ruler of Kerala as Calobotra, mentions Muziris, which has been identified by Dr. Burnell with the modern Cranganore, as the first emporium of trade in India. Tamil Literature too, has nothing but praise for the sea-borne trade that passed through this Chera seaport and we cannot but refer to two famous odes from the Agananuru and Purananuru, referring to his trade at Muzuris, and the articles (like pepper, etc.), obtained from the mountain and the sea exported to the countries of the Yavanar, i.e., Greeks, in exchange for gold. The songs are:—

- 1.சேரலர் சுள்ளியம் பேரியாற்று வெண்ணுரை கலங்க, யவனர் தந்த வியன்மாணன் கலம் பொன்னெடு வெந்து தேறியொடு பெயரும் வெளங்கெழே முசிரியார்ப் பென. (அகம். 148)
- ். கலந்தந்த பொற்பரிசம் கழித்தோணியார்க் கரை சேர்க்குந்து மூலத்தாரமும் கடற்ருரமும், தூலப்பெய்து மருநர்க்கீயும், புனலங்கள்ளின் பொலந்தார்க்குட்டுவென் முழங்கு கடல் முழவின் முசிரியன்ன.

(புறம் 343)

The *Periplus*, written in the second century A.D., also refers to 'Kerobotras' and the lands he ruled over. It says that it extended from Nouro and Tyndis in the north to Nelaynda in the south. Ptolemy (second century A.D.)

also mentions Karoura as the capital where Kerobotras lived.

The word Kerala will, if carefully analysed, ultimately lead us to the root Chera. Dr. Caldwell on the other hand erroneously conceived "Kerala" to be the original form of the word from which according to him Chera is derived. He committed the same mistake with regard to the word 'Dravidian,' but the mistake has been exposed by Dr. Grierson in his Linguistic Survey of India. In the Purananuru we find the words Cheralathan. Manikkavasagar's Tiruvachakam has "தென்னவன், சேசலன், சேசலன், சேசலன்" and in Tirumukkhappasuram given to Panapatra we have, செருமாவுகைக்கும் சேசலன் காண்க".

We know very well that in Canarese roots and words beginning with the palatal consonant C, it changes into the guttural consonant K, we give the following examples:—

Tamil.	${\it Canarese}.$

Cey (to do) .. Key
Cevi (ear) .. Kivi
Ceri (a hamlet) .. Keri
Centamarai (red lotus) .. Kenda

Centamarai (red lotus) .. Kendavara. Cennir (red water, blood) .. Kennir

Thus there is a greater possibility for the word ceral to have become keral and the country of Keral, Keralam in Canarese than for 'Cera' to come out of Kerala on and interchange easily and Keralam (Caroù) becomes easily Keralam, (Caroù). It is this form that has entered Sanskrit as Kerala. The Sanskritists might have taken the word from Canarese which was more easily

accessible to them perhaps, than Tamil which was spoken in the southern most part in India.

Rev. Foulkes* contends that Chera and Kerala denote the same country, Kerala being but the Canarese dialectical form of the word Chera. Dr. Gundert in his Malayalam Dictionary has, under the word Keram—"Canarese pronunciation of Cheram", "Chera = Malabar;" and under the word Keralam "Cheram = the country between Gokarnam and Kumari." While agreeing in the main with the learned Doctor that the word Ceram has become Keralam through Canarese, we are disposed to think that the word may have originated from Ceral, another form of the word Ceran. Many Cera Kings have been called as we know, Ceralan and Ceral. The word Ceral is used in the Silappadikaram itself while denoting the author of the poem as "Guisari Garagasia Garagasia".

It will not be out of place here to consider the terms "Malabar and Malayalam" which denote the country and its language now. We do not know for certain from when this word has come into existence to mean the language; and its etymology also is obscure. The word properly denotes the territory and not the language. It is composed of two words malai (mountain) and alam (from al to possess, to use, to rule and not to be confounded with al, depth) which means a territory subject to the domination of mountains. It is noteworthy that the word Malayalam does not occur either in the early or mediaeval Tamil Literature. As we have pointed out before, the country where Malayalam is now spoken was called Chera Nadu and the people called themselves Tamilar and in the

^{*}Salem District Manual, Vol. I.

Silappadikaram and other ancient Tamil classics the Cera king is spoken of as a Tamil king. Malayalam is also known as Malayalma, another form of which is Malayama; but both words are substantially the same. The appellative noun corresponding to Malayalam is Malayali (a man of Malayalam).

The origin of the name Malabar has given scope for much speculation. The first part of the word is evidently the Malayalam word for mountain as in the word Malayalam itself. The first appearance of this word mala with the suffix 'bar' is in 1150, and from the time of its appearance, the first part of the word is frequently found to change. Col. Yule gives the following Arabian forms—Malibar, Manibar, Mutibar, and Munibar. The following forms are used by early European travellers:—Munibar, Milibar, Melibar, Minubar, etc. From the arrival of the Portuguese in India it seems always to have been Malabar.

It has been difficult to ascertain the origin and meaning of the suffix bar. Lassen explained it as identical with the Sanskrit vara in the sense of a region, Malayavara meaning the region of Malaya, the western ghats. But the term Malayavara is fictitious, neither found in Sanskrit nor used by the people of the Malabar coast. The same difficulty stands in the way of Mala Varam, (Tamil, Malayalam), the foot of the mountains. Dr. Grundert suggested the possibility of the derivation of bar from the Arabic, barr—continent as he considered it probable that the name of Malabar has been first brought into use by Arabian navigators.

Colonel Yule arrived independently at a similar conclusion, but he preferred the Persian bar to the Arabic barr, and Dr. Caldwell* agreed with Colonel Yule and thought that bar, country, may have been added to 'Male' to distinguish the mainland from adjacent islands,—the Maldives and its Laccadives.

For a very long time Tamil was known to European scholars as the language of Malabar, or the Malabar language. Fabricius, who composed a Tamil Dictionary in the 18th Century, styled it "Dictionary of Malabar and English wherein the words and phrases of the Tamilian language commonly called by the Europeans, the Malabar language, are explained in English." It was only in the latter part of the 19th Century that this mistake was corrected, thanks to the writings of Beschi, Dr. G. U. Pope and other orientalists.

From the Silappadikaram we learn that the Cera king who ruled the country in the 2nd century A.D., was Senguttuvan. The author of this epic was the royal ascetic and younger brother of the king. He is called Illangovadigal (the royal prince ascetic). Senguttuvan is the best known of the ancient Chera Kings. He is also the hero of the fifth decade of Padirruppattu of which the famous Paranar was the author. Being a great warrior, Senguttuvan is said to have conquered extensive regions from Cape Comorin in the south to the Himalayas in the north.

வட திசை யெல்லே மிமய மாகத் தென்னங் குபரி யொடாயிடை யரசர் முரசுடைப் பெருஞ்சமக் ததைய வார்ப்பெழச் சொல்பல நாட்டைத் தொல் கவினழித்த போரடு தாணப் பொலக்தார்க் குட்டுவ''15

^{*}Comparative Grammar of the Dravidian Languages, III, 2nd Edn., p. 28.

^{15.} Padirruppattu, 43.

The Vanjikkandam or the 3rd Canto of the Silappadikaram is nothing but a graphic account of the king's northern expedition, in which he was assisted by his ally 'Nurruyar Kannar'. 16 On that occasion he fought a battle on the banks of the Ganges, in which the combined troops of certain "Aryan" princes among whom Vijaya, the son of a Bala Kumara. Rudra and others are mentioned. After defeating them he returned triumphantly with a fragment of stone from the Himalaya, for fashioning the image of Kannaki, the Pattini-Devi, who came to Malai-Nadu after burning down Madura, where her husband had been illegally sentenced to death by the Pandiya King. He built a temple, identified with that of modern Cranganur (Kodungalur) and consecrated her image there. From a few astronomical details available in the Silappadikaram K. G. Sesha Aiyar arrives at 171 A.D. as the year of fire which engulfed Madura at the Pattini Devi's command. Further, the poem says that at the consecration ceremony of the image, one of the princes present was King Gajabahu of Lanka, surrounded by sea (கடல் சூழிலங்கைக் கயவாகு). From this synchronism we can arrive at the date of Senguttuvan.

Historians are of the view that Senguttuvan's invasion was feasible in the disturbed conditions of North India in the latter half of the 2nd Century A.D.¹⁷

Space does not permit us to go into chronology and detailed history of the early Chera Kings. The Padirrup-

^{16.} Kanakasabai Pillai has correctly identified the Nurruvar Kannar with the great Andhra Satakarnis of the times.

^{17.} Cera Kings of the Sangam period. K. G. Sesha Aiyar, ch. VII, Section 5.

pattu, moreover is not completely extent now. The first and the last tens are lost. The extant eight sections deal with the achievements of these eight Chera Kings:—

- 1. Imayavaramban Nedun Ceralatan. (இமயவரம்பன் நெடுஞ் சேரலா தன்)
- 2. Palyanai-Selkelu-Kuttuvan (பல்யாளேச் செல்கெழு குட்டுவன்).
- 3. Kalankaykkanni Narmudicceral (களங்காய்க் கண்ணி நார் முடிச்சேசல்).
- 4. Kadal-Pirakkottiya Senkuttuvan (கடல்பிறக் கோட்டிய செங்குட்டுவன்).
- 5. Adukotpattu-ceralatan (ஆடுகோட் பாட்டுச் சோலாதன்).
- 6. Selvakkadunko-Valiyatan (செல்வக்கடுங்கோவாழியா,தன்.)
- 7. Takadur erinta Perunceral irumporai (தகடூர் எறிந்த பெருஞ் சேரல் இரும் பொறை).[₹]
- 8. Kudukko-ilanceral irumporai (குடக்கோ இளஞ்சோலிரும் பொறை).

The fifth decade, it will be noted, deals with Senkuttuvan of the Silappadikaram fame. For the names of the Cera kings celebrated in the Purananuru lyrics we have to depend on the colophon appended to each lyrics of that collection. From these we gather the names of the seventeen¹⁸ Cera kings; but some of these are reduplications. More than two attempts have been made to identify and assign chronological order for these cera kings. Full

18. Cera Kings of the Sangam period, K. N. Sivaraja Pillai.

justice cannot be done to the discussion¹⁹ here, and the reader is directed to consult the special works on the subject. Kanakasabai Pillai brings the Ceras up to the middle of the 2nd Century; K. N. Sivaraja Pillai takes them to the end of the 2nd Century; and K. G. Sesha Aiyer takes them still further to the end of the 3rd Century A.D.

It is curious that, neither in the Tamil classics, nor in Sanskrit, the language that is prevalent now in this country, is said to have been prevalent here in those days. The language spoken in those days was only Tamil, though it was Koduntamil and not Sentamil. Still it is a wonder that it is from this part of the country that the Padirruppattu and Silappadikaram, the famous Sentamil Kaviyan which poet Bharathi praises as capturing our mind (செஞ்சை அள்ளும் கெலப்படுகாகம்) saw the light.

The Purapporul-Venba-malai, the Tamil grammar assigned to the 7th or 8th Century A.D., the Perumal Tirumoli of Kulasekara Alvar²⁰ (Circa 600-800 A.D.), Sundaramurti Nayanar's Tevarappadikam on Lord Siva of Tiruvanjaikkalam, and his friend Ceraman Perumal's Ponvannattantati and Adi-ula (Circa 9th Century A.D.) sprang from this Cera country. This shows eloquently that the Cera kings were ardent patrons of Tamil, and that many of them were themselves no mean poets.

- 19. 1. Chronology of the Early Tamils—K. N. Sivaraja Pillai
 - 2. Cera kings of the Sangam period-K. G. Sesha Aiyer.
 - 3. Beginnings of South Indian History, Dr. S. K. Aiyangar.
 - 4. The Tamil 1800 years ago-Kanakasabai Pillai.
- 20. 1. Early History of South Indian Vaishnavism in South India, S. K. Aiyangar.
 - 2. Alvargal Kalanilai, M. Raghava Aiyangar, pp. 157-72.

Attention may now be drawn to the very interesting fact that the names of many villages in Malabar and Travancore which terminate in words like ceri, ur, kodu, karai, angadi, etc., indicate that they were originally occupied by the Tamils. Again, from the existence of the Tamil words kilakku and Merkku in the Malayalam language, Dr. Caldwell argues that the Malayalam country must have originally been colonised by the Tamils. words Kilakku and Merku literally mean downward and upward respectively. In these words the particle ku is a termination denoting direction. These words quite aptly describe the East and the West of the Tamil country. They are derived from the roots Kil and Mel respectively, both of which must have necessarily originated on the eastern side of the Ghats; for it is to the west of eastern plains that this lofty range of mountains rises everywhere with the result that to go westward is to go upward, while to go eastward is to go into the country sloping downwards to the sea. But the configuration of the Malayalam country is directly reverse, the mountain range being to the eastward and the sea westward. Notwithstanding this fact, the Malayalam words for East and West are identical with the Tamil words, Dr. Gundert argues that there is another word for denoting west in Malayalam, namely, Padinnaru, and that word is more commonly used than the word merku. It may be true, but Padinnaru is also a Tamil word. It is a corruption of Padinayiru, i.e., the direction, where the sun sets. In the Purananuru, stanza 82, the word occurs in the form of Pattanayiru (set sun). According to Dr. Caldwell these words are a positive proof of the early colonisation of the country by the Tamils.

Some of the old customs and manners of the people are still lingering in the country, we are told, though the traces of the very early occupation of the country by the Tamils are almost extinct except the Tamil element in the vocabulary and grammatical structure in Malayalam language, which therefore continues to be understood easily by a Tamil stranger. Among the ancient lingering Tamil customs, we venture to suggest here the Sakkaiyar-kuttu—the dance of the Sakkaiyar, of which Professor P. Sankaran Nambiyar of the Maharajah's College, Ernakulam, gives a valuable account and estimate in the 1939 Special Cochin Number of the Madras Mail in honour of His Highness the Maharajah's 77th Birthday Celebrations.

This Kuttu, which is, even to-day, very popular in Malabar, is said to have been performed before the Cera king, Senguttuvan, and on that particular occasion the Sakkaiyan chose to exhibit the Kodu kotticedam or adal of Lord Siva. The dress and make up, the gestures and abhinayams pertaining to this particular Kuttu, which the Sakkiyar selected for the occasion, are minutely described by the authors of Silappadikaram. We think that the "movements and facial expressions, the signs and gestures employed by the actors and actresses in the Kuttu" which Prof. Nambiyar says "are said to approximate most closely to the principles laid down in the authoritative sanskrit treatise on the subject, Bharata's Natya Sastra" are echoed in the description²¹ mentioned above.

In those days the language of the country and court was Tamil. The famous Tamil poet of the Sangam at Madura, Maduraikkulavanikan Sattanar, the author of *Manimekalai*, was a great friend of Senguttuvan, and Illango. He spent a considerable part of his time in Vanji, and he was responsible for supplying him the material, and

^{21.} Silappadikaram, XXVIII, lines, 67-77.

requesting Illango to compose the Silappadikaram. In fact the Silappadikaram was inaugurated in his presence.²² There are several references in the work which indicate that the kings and the subjects of the Cera country were proved to call themselves Tamils. One or two instances will suffice. The Aryan Princes,²³ Kanaka and Vijaya, offended the Tamil kings in a banquet, and to avenge the wrong committed to a brother Tamil king (Chola), Senguttuvan wanted to invade their country while he went north for bringing a slab of stone for the consecration of Pattini Devi.²⁴ Villavan Kodai, one of the ministers, while referring to the encounter of the king's army with the "Aryas" of the north, calls the army a 'Tamil one.'

It is remarkable that the proportion of Sanskrit words in the early Tamil works composed in the Cera country is comparatively small. In the later writings of Ceraman Perumal and Kulasekhara the proportion is much higher owing to Sanskrit influences. There is a tradition that the poet Kamban visited the country and lectured on his Ramayanam. Even to-day his great Epic is highly popular here. Almost the first work in the early Malayalam language is the Rama Charitam which is closely modelled on Kamban's great work.

Sanskrit authors even up to the end of the 7th century A.D., refer to the languages of South India only as Telugu and Tamil. Kumarila Bhatta, a Brahmin philologist of the last decades of the 7th Century A.D., refers to the "Andhra Dravida Bhasha," the Telugu Tamil langu-

^{22.} Vide Silappadikaram padikam and XXV, lines 65-92.

^{23.} Ibid., XXVI, lines 159-160, XXIX.

^{24.} Ibid, XXV, line 158.

age or perhaps, the "language of the Telugu Tamil countries."

Canarese was probably supposed to be included in Telugu, and Malayalam in Tamil, and yet both dialects, together with any sub-dialects that might be included them were evidently regarded as forming but one bhasha. Malayalam therefore was not yet evolved as a separate language. Even the three sasanas granted to the Jews are in old Tamil dialect, and they are recorded in the old Tamil script called Vatteluttu. These deeds of Baskara Ravi Varma have excited much interest not only because of their antiquity, but because of the curious fact that by them the ancient Cera kings conferred on the Jewish colonies certain privileges which they still possess to some extent. The Jews appear to have visited the western coast in the early centuries of the Christian Era. They have a tradition that a large number of their nation came and settled in Malabar soon after the destruction of their temple at Jerusalem²⁵ in 68 A.D. charters have been translated more than once, and there has been much diversity of opinion regarding the dates assigned to them. While the learned author of "The Tamils 1800 Years Ago" assigns the last decade of the 2nd Century A.D. to the two deeds granted to Joseph Rabban, Lord of Anjuvannams and to his posterity, Dr. Burnell on palaeographic grounds assigned these to the 8th Century A.D. Placing the first deed in A.D. 774 as the only year in which the astronomical details of the date furnished by the grant would be satisfactory.

^{25.} i. Tamils 1800 years ago, p. 60.

ii. Malabar Manual, Vol. II, pp. 115-122.

iii. History of Kerala, Vol. II, pages 507-512.

Dr. Kielhorn says that A.D. 774-775 is not the only year possible, and points out two dates—10th March 680 and 11th March 775 A.D. Sir Walter Elliot fixes 861 A.D. Whatever the date may be, we are here concerned only with the language of it.

The State Manual of Travancore, which is, no doubt, an authoritative history of the State, contains a few observations on the relationship between Tamil and Malayalam. It states—"The earliest phase of the language (Malayalam) must have been scarcely distinguishable from that dialect of Tamil which is called Koduntamil by scholars. It may be considered that Malayalam sprang from Koduntamil. Separated from the parent stock by natural barriers of mountains, the off-shoot of Tamil must have undergone gradual changes according to the circumstances and nature of the soil. Phonetic decay, differentiation and other agencies which are ever at work in the infancy of a language, must have had a full play in the case of Malayalam until the advent of Sanskrit. The Sanskrit language affected the vocabulary and grammar of Malayalam. Poets and authors indented upon Sanskrit not merely for the expression of abstract ideas, but even for indicating ordinary objects and things. In spite of this tendency, the literary language continued for a long time to follow the old Tamil models. The oldest poem now extant is Rama Charitam written in the 13th Century A.D. It was composed long before Sanskrit learning found favour in the land. It exhibits the earliest phase of the Malayalam language, and savours more of Tamil than Malayalam."

The mediaeval period of Malayalam is marked by the writing of Kannasa Panikker. He has written the Ramayana, the Bhagavata, the Bhagavad Gita, etc. His language

shows the transition stage of Malayalam in a stage in which the Malayalam tries to throw off Tamil inflexions and grammatical formations. Panikkar has been called the "Chaucer of Malayalam."

The modern period commences with the advent of Tunjatta Ramanuja Ezuttacchan of the middle of the 17th Century A.D. This poet set himself to the task of bringing the treasures of Sanskrit literature within the reach of ordinary man. He found that Malayalam as it existed then was not a fit vehicle for conveying refined thoughts. He therefore strove to develop the latent resources of his mother tongue. He rejected the old Tamil Vatteluttu alphabet (which did not have the hard aspirates, sonants, sonant aspirates, sibilants and aspirates, peculiar to Sanskrit) as defective, and adopted instead the Arya Elutu, better known as the Grantha script. He invented a new literary style blending Sanskrit and Malayalam idioms, and called it Manipravalam. He also created a new metre in Malayalam poetry called Kilippattu which has a peculiar melody and flow of its own. With regard to the modern Malayalam Dr. Caldwell says: "It is remarkable that the brahminisation of a language and literature has now become complete. This process appears to have been carried on systematically only during the last two or three centuries. The proportion of Sanskrit words is least in Tamil and greatest in Malayalam. The modern Malayalam character seems to have been derived in the things the difference between Malayalam and Tamil, though originally slight has progressively increased, so that the claim of Malayalam as it now stands to be considered not as a mere dialect of Tamil but as a sister language cannot be called in question. Originally, it is true, I consider

it to have been not as a sister but a daughter. "Malayalam being as I conceive" says the learned bishop, "a very ancient off-shoot of Tamil differing from it chiefly at present by its disuse of the personal terminations of the verbs and the larger amount of Sanskrit derivatives it has availed itself of, it might perhaps be regarded as a dialect of Tamil, than as a distinct member of the Dravidian family." Dr. Gundert however appears to be unwilling to consider Malayalam as an off-shoot of Tamil. He says:—"These two languages of old differed rather as dialects of the same member of the Dravidian family than as separate languages."

M. Srinivasa Aiyangar,²⁷ on the other hand, accuses Ezuttacchan for having given a deathblow to Tamil, his mother tongue. In somewhat severe language the learned author says: "For this act of vandalism he (Ezuttachhan) is admired by the people of Malabar as the father of Malayalam classical literature."

We have so for tried to trace the early history of the country and language; but the various aspects of the life of the people, their culture, commerce, arts and crafts, dress, customs, etc., which can be culled out from the Tamil works of the period, are not furnished here for lack of space.²⁸

- 26. Introduction to Dr. Gundert's Malayalam Dictionary.
- 27. Tamil studies, The Origin of Malayalam.
- 28. The works of Kanakasabai Pillai and K. G. Sesha Aiyar, the Malabar Manual and Gazetteer, the Cochin Manual and the Travancore Manual, afford information on culture. R. P. Setu Pillai's studies in Silappadikaram in Tamil, Ch. 6, gives a valuable picture.

THE ANNAMALAI UNIVERSITY—A UNIQUE FOUNDATION.

By

PROF. V. K. AYAPPAN PILLAI, M.A., (Oxon.), Professor of English, Presidency College, Madras.

The invitation kindly extended to me by my friend. Dr. B. V. Narayanaswami Naidu, to contribute an article to the Rajah Sir Annamalai Chettiar Commemoration Volume was welcome, as I have always been convinced that the munificence and unexampled generosity of the Rajah which provoked the Government of Madras to an equally generous expenditure of public funds, was an act which deserved our warmest praise and gratitude. moment's reflection should convince us that, although our worship of Saraswati, our passion for education and learning, have always been high, and perhaps genuine, we never regarded that endowment for educational purposes was a sacred duty to society which its richer members owed to it. The chorus of praise with which the few exceptions are received is testimony to their rarity. If the goddess of wealth has blessed the Rajah's endeavours, the goddess of wisdom has endowed him with the vision and discernment to realise that there is no better or more enduring mode of using one's wealth than in giving birth to an institution where, for generations to come, young men and women of the country could receive the blessings of a liberal education. Both in itself, therefore, and as an example to others equally favoured, the Rajah's gesture has been full of significance.

The princely gift of the Rajah of Chettinad which started the foundation gives to the Annamalai University a character all its own; but there is another circumstance of equal significance. The University founded in Chidambaram is of the unitary and residential type of which there is no other instance in the South and but a few in all India. It is well known, that it was the famous despatch of Sir Charles Wood in 1854, which brought the question of the founding of Universities in India, to the forefront. We read in that document that "among many subjects of importance none have a stronger claim to our attention than that of education. It is one of our most sacred duties to the nation, to be the means, as far as in us lies, of conferring upon the natives of India those vast moral and material blessings which flow from the general diffusion of knowledge, and which India may under providence derive from her connection with England." When, however, in pursuance of this enlightened policy, which is undoubtedly the source of the progress which the country has had these years, the universities of Calcutta, Bombay and Madras were founded in 1857, they were modelled rather on the University of London than on the much older and greater foundations, the residential universities of Oxford and Cambridge. The University of London, it need hardly be said, has a great reputation: it has always brought together many eminent men in their spheres of knowledge and it has always striven to set its standards high. The nucleus of the London University was University College, founded "by a group of enlightened liberals and radicals for the purpose of giving a University education to qualified students 'irrespective of class or creed'." compete with what was regarded as this "godless university," the Anglican community soon brought into being

King's College. In the meantime various educational institutions had sprung up all over the country and the London University was empowered in 1858 "to examine for a degree any students who presented themselves regardless of how or where they had studied." This is the ground of the one serious criticism always levelled against the University of London: in the words of Dr. Flexner, "if a university is, whatever its type or form, a highly vitalized organism, vitalised not by administrative means, but by ideas and ideals, with a corporate life, I confess myself unable to understand in what sense the University of London is a University at all." It was, however, perhaps inevitable that when in 1857 the three Presidency Universities were founded to serve the needs of this vast continent, anything like a residential university of the unitary type was unthinkable. The colleges founded for the purpose were to impart the teaching and the universities merely to examine the candidates and present them their degrees. The Universities of the Punjab and of Allahabad, founded in 1882 and 1887 respectively, in order to relieve the Calcutta University of some of the heavy burden she was bearing, were also of the same type as those of Madras, Bombay and Calcutta. Gradually, however, it was recognised that Indian Universities should aim at being not merely agencies to conduct public examinations, but that they should undertake both teaching and research. should bring both teachers and pupils together, that, in short, the type of university organization known as the residential should, wherever possible, be given preference to the merely affiliating type patterns of which were London and the new Indian universities. The findings of the Calcutta University Commission which was presided over by Sir Michael Sadler, and which included among its members

distinguished educationists like Ramsay Muir, gave a great impetus to the residential ideal which was strongly advocated by the Commission. It was in this atmosphere that the unitary and teaching universities of the residential type, founded in Benares and Aligarh, Allahabad, Dacca and Lucknow, came into being. The Madras University Act of 1923 had for its principal object the reorganization of the University "with a view to establishing a teaching and residential University at Madras, but neither in the parent university of Madras, nor in its daughters at Mysore, Waltair and Trivandrum has it been found feasible to achieve The Annamalai 'University, howthe residential ideal. ever, founded in 1929 is "unitary, teaching and residential in character, the first of its kind," with little or no chance of being followed by a second, "in South India." It will be admitted that an institution which is unique both because it is a monument to the generosity and the vision of its founder and because of its character as a unitary and residential university deserves the warmest and discerning support of the citizens of South India.

Is there any special virtue in this residential ideal which deserves our sympathy and consideration? It is no doubt true that the residential idea is enshrined in the older Universities of England, and these are, by the consensus of world opinion, among the very greatest universities of the world. But are they not "semi-monastic institutions "which, arising in the Middle Ages, still retain in their character something of their origin? It cannot be denied that Oxford and Cambridge are the only residential universities that do exist. The newer universities of England, those of London, Sheffield, Manchester and others, the great universities of Scotland, are, like those of Germany, first rate organizations for purposes of learning and

research, but in no sense residential. Nor are the great American Universities of Harvard and Yale residential But it has been generally recognised that the ideals which underlie the residential system as embodied at Oxford and Cambridge are ideals of singular educational value. In the residential universities students who assemble together from the different corners of the country, or from beyond its borders, students differing not infrequently in their race and creed and their social upbringing, live together for a period. This common living, it has been found, affords unique opportunities for that free social intercourse necessary for the development of the maturing mind of the student who as a human animal is necessarily a social being. It is not the contact of the pupils with the matured minds of their teachers only, the value of which no one will question, but the contact of the pupils with their own fellows which is of inestimable educational value. The opportunities of a residential university are that this contact which is so valuable for the harmonious development of the faculties of the adolescent pupil is made possible not merely in the class rooms and lecture halls, but in the common rooms of students, in debating societies, in religious associations and in games. It is well known that what is known as the tutorial system is a prominent feature of Oxford and Cambridge. "In its purest form it is tete-a tete dialogue between tutor and pupil." This is, of course, nothing strange to our ideas and is no other than the method followed by the ancient rishis and gurus, the method of Sandipani with that famous pair of pupils, Krishna and Kuchela. I am well aware that the tutorial system has its difficulties, often insuperable, in modern conditions and has been abandoned in Indian institutions. often without giving it any serious trial. I do not know

if Annamalainagar ever took it up seriously or gave it the consideration it deserved. But it seems clear that Annamalainagar, where there is, fortunately, only a single college for Arts and Science, with a few special schools of study attached, the opportunities for carrying out the residential ideal are unique. A proper recognition of the uniqueness if the foundation would be to develop to its utmost limits the residential ideal which underlies the university.

One of the recommendations of the Sadler Commission has been that Intermediate education should be separated from that of the University. Only a few universities like Dacca have carried out the recommendation and Annamalai University has left it severly alone. But it appears to me that, rid of the responsibilities of its Intermediate section, which no doubt helps to swell the limited income of the university, the Annamalai University which is already turning out excellent work in several of its branches should be in a position to grow into a real residential university, concentrating its efforts mainly in the development of such branches of learning and research as are not provided elsewhere but, at the same time, are of immense value for the conservation and enlargement of South Indian culture. A University which sets before itself the highest ideals, which attracts to itself men of scholarship and character devoted to the single-souled pursuit of learning and culture, untrammelled by the interests of party and of narrow and petty considerations, and offers them reasonable conditions under which they may live and work, a university whose jealous care is the maintenance of the highest academic standards, has nothing to fear. It fills an essential need of the community and is bound to live and thrive. May we not hope that the Annamalai University founded by the Rajah of Chettinad, whose Shashtiabdapurti the University rightly proposes to celebrate in a fitting manner, will develop into one of the premier institutions of South India, making its invaluable contribution to the moral and intellectual advancement of this part of our great country?

THE WORSHIPFUL MINISTER

By

M. Balasubrahmanya Mudaliyar, B.A., B.L., Hon. Secy. Saiva Siddhantha Mahasamajam.

Did you ever hear of a king worshipping his own minister? Has the mighty ruler of a vast country in any system of civilisation ever spent a whole year, day in and day out, hearing a learned disquisition on the lives of saints who belonged to the hoary past? Could a monarch ever afford to depute his prime minister for twelve months on a non-political mission? You would say "no"; yet all these strange things did happen in the Tamil country in the twelfth century of the Christian era. The king was Kulotunga Chola the Second and the Minister, Sekkilar.

Literature was the king's hobby, and the Jain work Jeevaka Chintamani was his favourite book. The shrewd minister was an ardent Saivite and could not contemplate with equanimity, the rising tide of Jain influence over the young king. He perceived that a glowing version of the selfless lives of the sixty three Saiva saints was the only means to retrieve his master. In his afternoon conversations, he narrated to the king some of the soul stirring incidents in the lives of these saints. The king was so fascinated that he begged of his minister to reduce the lives into a book. He got his furlough, went to Chidambaram, gathered a band of scholars around him to collate all the available material for him, and produced in an exact year the "Periyapuranam."

It was the most valuable book yet produced on Saiva history. Its value must be judged, not with reference to the modern scientific methods of historical research, but with due regard to the times when history was still in its infancy in most countries of the world. The way in which pieces of internal evidence to be found in the songs of the three great Saiva saints were put together, and their biographies shaped, makes one wonder how the author would have fared if better and ampler material had been available. The book was not merely history or biography but also a piece of literature possessing high classical value.

The king was so much impressed with the excellence of the book, which was in verse, that he requested his minister to undertake a very detailed exposition thereof. The minister agreed. A daily assembly of scholars was convened by the king for a year. The hall chosen was the grand edifice with a thousand pillars in the northeast corner of the Chidambaram temple. The minister explained all the niceties and subtleties of the book in such a way that the entire audience was entranced and spellbound. Pindrop silence prevailed and the soul was lifted far above the mundane plane. Tears flowed freely when the sufferings and privations of some of the saints were narrated. king and his subjects felt alike. The year was a unique experience in the life of everyone. The seed for a true university was then sown, and it has taken eight long centuries for it to sprout out and shape itself into the temple of learning, whose founder's sixty-first birthday we are proudly celebrating to-day.

The king was overpowered with emotion and fell at his minister's feet. He mounted the minister and his book on the state elephant, sat behind them, and waved chamara with both his hands, and went in procession round the main streets. His subjects stood speechless and wonderstruck, watching the royal procession. Here was pen mightier than the sword in the noblest sense.

The minister was so sincere in practising what he preached that he preferred retirement to the glamour of state. The king gave leave with a heavy heart and chose the minister's brother to succeed him. The minister in his retirement was provided with every comfort which a simple and solitary life demanded. He spent his last years in devout contemplation of his Maker.

Nowhere has history recorded events of this kind which lift us from the base and material turmoils of earthly existence into the ethereal region of spiritual communion with the Infinite. Such events did truly happen at Chidambaram once. Let us pray for their repetition in a suitable form in the near future to lift us back to catch a glimpse of that bliss.

THE FUNDAMENTALS OF CULTURE

By

BEGUM SULTAN MIR AMIRUDDIN

On the occasion of the 61st birthday of the Rajah of Chettinad, I wish to join the chorus of tributes offered to him for, his share in the cause of promoting culture in larger than that of any other man in South India. Annamalai University stands out as a towering and glorious monument to the magnanimity of its great and noble founder and demonstrates his wisdom and foresight, for it is an effective, genuine and progressive University education that can supply the nation with the creative minds of culture and with youths equipped with the qualities of leadership which it so much needs. There is a tendency in some quarters to belittle the importance of the establishment of Universities and consider efforts at the expansion of higher education to be a superfluity, but at the present stage of India's history when wise planning and deep thinking to reconstruct national life are so essential in order to enable her to take her due place in the comity of nations, we require a sufficient number of men and women endowed with the training that higher education imparts. I do not believe that there is a surfeit of such men and women in this land at present and higher education cannot be said to have reached saturation point.

In this article I wish to deal with the fundamentals of true culture, in the implanting of which our Universities are primarily engaged. Culture in its etymological sense means cultivation and has many connotations, but it is usually taken to be synonymous with the cultivation of the mind through the medium of knowledge. In the majority of instances education is an indispensable pre-requisite of culture for knowledge is power; it is knowledge that supplies us with facts, ideas and ideals that make up life's kaleidoscope. Facts dominate life and ideas control the world and these have their basis in knowledge, which endows one with the capacity of deciding what to do. Usually it is education which holds the key that unlocks the treasures of culture. Hence the very essence of culture must be art and science and the human effort concerned—ceaseless effort in the sphere of study and in the domains of observation, reflection and contemplation.

But culture is not simply the cultivation of the mind. Mere knowledge which satisfies curiosity and the crowding of one's memory with facts is not culture; rather culture is the fine fulfilment of the knowledge acquired. How is this fulfilment achieved? By activity of thought. Knowledge becomes active thought when it is utilised and applied to the life around. But though knowledge static and inert is not culture, it must be remembered that knowledge in motion for wrong ends is the most terrible force in nature and is the very negation of culture. Totalitarian Europe offers an example of this, where, despite intellectual progress of a high order and the onward march of science, the elements of culture are absolutely wanting. Thus while knowledge is comparatively useless unless put into application, it must be not utilised and related to the affairs of life as will satisfy human needs and lead to human amelioration. Bacon says, "Some men think that the gratification of curiosity is the end of knowledge; some love of fame; some the pleasure of dispute; some the necessity of supporting themselves by knowledge, but the real use of all knowledge is this that we

should dedicate our reason which was given to us by God to the use and advantage of man."

The application of one's knowledge for human needs being the real import of culture, we find that it is not merely in the centres of learning that culture resides. It is not uncommon to discover sometimes even an uneducated cultivator, with no literary education at all but who has learnt his lessons on the book of Life and on the lap of Nature, to evince greater signs of culture than some of the by-products of our Universities. In such a case, though the range of the man's knowledge is small, that knowledge sparkles, it is alive; though his ideas are few, they are not inert and dead matter but constantly related to the stream of events that enter his life and the lives of those within his ken. This fundamental of culture, namely that the mind enriched and humanized should be a running brook for those that need to quench their thirst and not a still image on the canvas has to be grasped by those who are engaged in the pursuit of higher knowledge, and our Universities should set before themselves the task of evoking the interest of the students in putting their knowledge to use and throwing it into all its combinations with the life around. Education is generally undertaken for its utility as a means of livelihood and also as a mark of polish and refinement, but it is deprived of its real significance if in the pursuit of narrow personal ends it fails to arouse in the minds of young men and women that impulse of service, which is the essence of true culture. An education that does not rouse one's active sympathy to the dumb pangs of misery and unhappiness of the lives submerged in the shadows is one that is devoid of its cultural aspect.

The time has arrived when the youths of this land, who are the future moulders of the nation's destiny, should realize

the true significance of culture and get acquainted with the implications of Noblesse Oblige. A sphere wherein they can render yeoman service is that of the liquidation of mass illiteracy. The problem of making India's population literate is one of stupendous magnitude and of urgent importance. We learn in history that in the reign of Asoka about 60 per cent of the inhabitants of this land were literate. To-day, however, not even 10 per cent are literate. And it is the monster Ignorance that has been devastating the land from a long time past that has given birth to the evil conditions, which are undermining the strength and sapping all potentialities for good inherent in the nation. India's appallingly high death-rate, the incidence of epidemic diseases, the existence of social evils, and the prevalence of a high rate of crime are all to be traced to the ignorance in which people are steeped. During the past 50 years, every decennial census showed an increase of 1 per cent literacy. If the present rate of progress of literacy is not accelerated, it will take at least a thousand years for India to become literate. Since the task is of immense magnitude and of vital importance, it behoves the students of the Universities to contribute their quota to the great work of national regenera. tion. China has awakened from her opiate slumber of ages by the efforts of her students, who have dedicated a good portion of their holidays to imparting knowledge to the adults. Will not the youths of India answer the sonorous call of duty when the clarion is sounded? If they have imbibed the true spirit of culture, there is no doubt that they will.

While service constitutes an essential element of culture, it is erroneous to assume that a life of isolation from worldly affairs is a necessary pre-requisite, for a cultured man is pre-eminently one who does not ignore the practical aspects of

existence. As has been pointed out by Johnson, "The seeds of culture may be planted in solitude but must be cultivated in public." Culture though born of meditation, through the inward travail of the spirit, thrives most in contact with life and draws its vitality both from Nature and from man and is never inert but active.

Culture denotes the cultivation of a higher quality of life consequent on the mental training received, whether through the medium of books or otherwise. While objectively it requires an intelligent understanding of and interest in something tending to human welfare besides one's own job in the workaday world, subjectively it calls for self-analysis, selfcontrol and self-reformation. Culture manifests itself in good manners and a catholicity of outlook that recoils from arrogance and exclusiveness; in understanding that ignores not charity; in a spirit of compromise and accommodation that realizes the need to co-operate with others and adopt the principle of live and let live; and above all in sympathy that knows no caste and creed. Culture awakens the sense of fellowship latent in all men. A cultured individual realizes that life is a unity and man is part of that life; he is conscious of the fact that he is part of that one world process that is at work about him as in him, and like the ancient Roman Emperor proclaims, "I do not regard as strange and foreign to myself anything that is human inasmuch as I am human."

Moreover, a cultured man not merely recognizes diversity, which is Nature's law, but respects it, since variety yields charm and colour to life. In a land like India inhabited by members of different castes and creeds, the most urgent desideratum of to-day, namely unity, can come about, paradoxically, not by a process of uniformity but by respecting differences. The hall-mark of a cultured man and woman is to be free from narrow prejudices and to be able to

appreciate the good and beautiful wherever found. No community or race should suffer from the delusion that it alone has the monopoly of truth, of virtues and of the fine arts, for of all dungeons the most terrible are those invisible ones wherein men's souls are imprisoned in self-delusion bred by vanity. The environments, the requirements, the temperaments and traditions of the various races and peoples have been responsible for different ways of approach to life's problems, but the divergences of the paths pursued should not befog our vision to the soundness of many of the methods and maxims of those different from ourselves. Kipling rightly says, "There are nine and ninety ways of inditing tribal lays, and very single one of them is right." Culture is essentially broad-based in its outlook and its appeal is universal. Hence the different centres of learning while recognizing and utilising diversity should admit interchange and exchange and each University should establish Chairs for the fundamental ideals and realities within other cultures besides developing its own and pulsate with all thoughts that are high, noble and great, not merely in the life of its own people but of the world in general. In the words of Lord Morley. "Let there be preferences, but let there be no exclusion."

India remains chaotic because the mental approach of the nation is defective. The problems of India will be solved when the educated sons and daughters of her land will become imbued with the true spirit of culture and will realize that despite diversities, the adherents of different beliefs, customs and traditions and the products of varying environments while retaining their own individuality and living their own lives to the full can still combine together as in a symphony orchestra, wherein the various instruments, though they are different from one another, yet all contribute to the production of a melodious harmony. Such a combination and the cultivation of the true choir spirit, wherein each singer is given full scope to develop the best in him while he, on the other hand, gives of his utmost for the success of the choir, should be one of the ideals towards which our seats of learning should strive.

Mathew Arnold spoke of sweetness and light as the marks of true culture. The Annamalai University has added to it faith and courage—qualities which are of profound significance at the present juncture of world history. One of the most threatening features of life to-day is the reaction against faith and reverence, and expert designers who are planning out the main lines of a new and better order realize that their edifice will never stand unless steps are taken to check the rising tide of irreverence and lack of faith. Indeed, without faith the wheels of progress will be braked and civilization is bound to suffer a collapse. Courage is also a quality whose need was never greater than at present-Courage to battle against the forces of evil, courage to face life's problems with a spirit of stern, persistent determination to overcome difficulties, courage to surrender prejudices, courage to resist mass thinking and the temptation to applaud all popular sentiments irrespective of quality, courage to act up to one's conviction and to the new vision of world progress.

In short, the idea of refinement appears to be inseparable from that of culture. The term refinement calls up to mind the picture of a furnace burning the dross and yielding the gold or that of a sieve sifting the grain from the chaff. Culture imparts a finer tone, a gentler touch and a nobler quality to an individual and contributes to a richer life more directly than health contributes to wealth.

Though the acquisition of culture involves unremitting effort and sacrifice, the satisfaction obtained therefrom is immense, for while the pleasures of wealth and power are fleeting, the ecstasy derived from culture is perennial in enjoyment and of permanent duration.

THE RAJAH OF CHETTINAD

By

MR. SOMASUNDARA BHARATI, B.A., B.L.

Dr. Rajah Sir Annamalai Chettiar, the first Rajah of Chettinad, is a unique personality. And his diamond Jubilee is now fittingly commemorated by his grateful countrymen whom he long served and lavishly benefited by his numerous acts of Philanthropy and Patriotism. Hailing from the most talented affluent and charitable family of hereditary Bankers in Kanadukathan, he yet easily out-distanced and eclipsed all his forbears and cousins both in making colossal wealth and what is rarer still in wisely and lavishly spending fabulous fortunes on public welfare.

Many are celebrated charities that redound to the credit and glory of his family; now for nearly a century, starting from 1850. Chidambaram where God Nataraja sarabands His Eternal Cosmic dance came to be the centre of their charitable activities. The famous Gold-domed hold fane of God naturally received their first attention. The Pagoda and the Towers were renovated extensively and elaborately on the eve of this century. A feeding house for the poor and choultry for all pilgrims were their next gifts to this place of perpetual festivity. The Rajah Sahib's senior brother, Diwan Bahadur Ramasamy Chettiar, the first Dewan Bahadur in Chettinad, earned the eternal gratitude of this holy place by his invaluable two-fold gifts of a well equipped High School and a protected water supply to quench the physical and mental thirst alike.

Walking in his brother's wake, Rajah Sir Annamalai Chettiar first founded on the east suburb of Chidambaram three great Colleges successively, all in the name of his favourite Goddess, to wit Sree Minakshi Arts College, Sree Minakshi Tamil College and Sree Minakshi Sanskrit College. To these he soon added his Sree Minakshi Oriental Training College. He then started his brilliant career by quietly and unostentatiously minting millions with his untalents on the business one hand. gifts, endowments the other lavish bv ways counting benefactions in countless with and distant all over Tamilaham even in non-Tamil countries such as, Ceylon and Burma. is no exaggeration to say that there is not any great institution or cause, community or country within the ambit of his enterprising fellow Nagarathar's activities that was not enriched or benefited by the inexhaustible purse and philanthropy of this modern Croesus and Macalnas rolled in to one. The Madura College, and the American College and Hostels in Madura and Pasumalai, the National High School at Trichinopoly, the Mylapore P. S. High School, the Indian Public School at Dehra Dun, the Irwin School at Delhi, the Ramakrishna Institution at Madras and Ootacamund and several educational and religious institutions in Rangoon, Moulmein Kanbe, and Colombo, the Y.M.C.A. and Red Cross Society are only some of the many institutions which were fertilized by his munificence. His piety which is non-sectarian, enthused him to renovate at great cost Thillai-Govindar's Shrine, God Pasupatheeswara's Temples in Annamalai and Karur, the Hindu Temple in Colombo, besides the abiding upkeep of the works, and maintenance of Kuttelais and endowments at the holy shrine of Sree Nataraja in Chidambaram.

The Crowning glory of his passion for services to his fellowmen and the sweetest fruits of his native patriotism is the latest yet the first and only Unitary, Teaching and Residential University in South India appropriately named after him. It is an edifice emerging four-square on and out of the four Sree Meenakshi Colleges which he previously founded on his extensive estates in the eastern environment of Chidambaram. The imposing new University buildings superbly and solidly built grudging neither cost nor care, stand towering above and overlooking, extensive grounds which are in turn enveloped by emerald fields and green swards. They form by day a panoramic perspective of picturesque piles, as a rare and unique blend of Classic Indian, Saracenic and Romantic styles, By night the brilliantly lighted premises of the University present a tableau of celestial charm of seraphic rest. The sanitary water supply, perfect drainage, the swimming pool, and boating channels each enormous cost the extensive and up-to-date play grounds and exquisite sports pavilion, are some of the graceful additions to the university, each and every one of which indebted more or less to the Rajah's privy purse. The new guest and resthouse and the staff-club on grand style are also indebted to his munificence. The magnificent ladies' club which is a very unique, costly and fine building, with extensive welllaid grounds is also the exclusive gift of the Rajah Saheb to the University. The hostels in general and the new Women's Hostel in particular add to the charm of the panorama. In short the buildings alone would be worth about twenty-five lakhs of rupees.

Add to all this, his lavish contributions to the University endowment fund, and the several auxiliary and additional endowments for prizes, medals, studentships to

scholars of this university for studies both in the university and in foreign universities. The up-to-date library house in the superb left wing of the new Senate House, the science laboratories, and the charming music college wellmatch and add to the fascination and utility of the University. Great endowments to educational institutions are not rare all over the world. But a well-equipped and endowed modern university owing almost its all from its inception to private enterprise and personal philanthropy of a single individual is not heard of in the old world, whereas the Rajah's University is an up-to-date Modern University second to none. The unparalleled philanthropy of this modern Croesus of South India attracted the attention of even the apathetic alien rulers. The Vicerov on the local Government's well deserved recommendations bestowed on him the hereditary title, style, honour and privileges of a Rajah in recognition and acknowledgment of his great philanthropy and genuine patriotism, in addition to the many other titles they had previously honoured him with such as the Knighthood, Diwan Bahadur, etc.

The Rajah is a real Karma Yogin, and his admirable disciplined life most rigorous and yet most restful, is the envy of businessmen and a wonder to all. With a zest for work, and spleen-proof placid temper an admirable abandon coupled with a genius for infinite industry and devotion to details, with volcanic energy embalmed in sweetest suavity, with an unbending will matched by innate courtesy and instinctive devotion, with enthusiasm in enterprise and aversion to lassitude, he is easily a prince among men as he is a man among princes. Rising invariably at 4 a.m. he finishes his ablutions and devotional regimen and urgent personal business correspondence all before 7 a.m. He is then ready to attend to the heavy business routine entailed by the in-

numerable business organisations and branches he runs in India, Burma, Malaya and Ceylon, and to calls and appeals to his head and heart, his time and purse alike. His unfailing method and admirable system, his mastery of details, his phenomenal memory and ready resources are some of his traits rare even among the captains of Industry and multipliers of millions in the busy west. His statesmanship, his reserve with well informed and diplomatic talent, his deep knowledge of men and affairs and his versatility would easily have made him a forefront cabinet-minister, Premier or President if only he were a citizen in any self governing country. As it is he stands in the Indian world of to-day as a striding colossus of wealth, a power for benevolence and a tower of strength to his weaker countrymen. His delight is his silent selfless service, and his strength is his matchless character. His unrivalled and enviable success is the fruit of his manifold virtues. His lofty service to culture and higher education earned him his doctorate honoris causa from the Madras University. We, his grateful compatriots and admiring countrymen cordially wish him on the happy completion of his Sixtieth Birthday a Methuselah's longevity, Solomon's happy prosperity and Socrates' wisdom. May the Almighty God shower lavishly all His choicest blessings on this Modern Kubera and inspire him to continue to promote the progress of his mother country and the welfare of his loving but less fortunate country. May he live long for the Glory of God and for the honour and success of perseverance, patriotism and public service, as an example to his peers now, and as an inspiration to all in future, is the prayer that goes up to God to-day from the hearts of all his well-wishing fellow-countrymen.

NATIONALISM AND DEMOCRACY

By

R. Bhaskaran, M.A.

Since the French Revolution, the states of Europe and the colonial countries of the world have grown on the two principles of Nationality and Democracy which seemed to sustain and fortify each other. Nationalism has had its critics: Lord Acton called it a retrograde step in history. Democracy too has its detractors who find it guilty of the grave error of supposing that a crowd could understand and choose. But, in the midst of "the chaos of talk, of argument, of opinion," men must find some excuse for unity and build a state for their secular needs, or be drawn into the political orbit of a stronger com-The task is always urgent and the penalty of failure is extinction. A common loyalty to something outside of self is needed to make a community: the nation replaced the dynastic ruler as the object of such devotion. Authority is needed to transform the community into the more enduring structure which is the State; Democratic theory furnished government with the sovereign authority of the General Will. Thus there is nothing fortuitous in the close association of nationalism and democracy at the beginning of the Nation-State. If people come together, they do so only because they all recognize certain values distinct from the values of other people. If a community keeps together, it can do so only under a government which can be trusted to guarantee these values. Yet it would not be right to describe the state as the work of free will and reason; for in the world of reality there are no absolutely free individuals and rational choice is almost non-existent. Nations are seldom truly "self-determined." Nationhood is sometimes achieved by the pressure of active groups inside the community. And "small" nations are born of the strategic needs of great powers. National unity may be fostered by similarity of culture, race, language, social habits and historical experience among the people that constitute the nation. National governments may acquire greater power by closely representing the national mind. But forces inside the national community and outside should be favourably disposed if a Nation-State is to emerge and survive.

In whatever way a Nation-State may be founded, it cannot forever be immune to attack. The complex of hopes, aspirations and fears that made it soon unmakes it. The cultural values of the ruling group are repudiated by the generality which once followed the èlite. Patriotism tends to find a smaller and more intense expression as regionalism. Submerged dialects come up again and divide the Conservatives and radicals split the community. Several sectional economic interests engage in strife. When people see themselves as really belonging not to the political community of the nation but to a small group or class, when classes within the state appeal to or sympathise with similar classes in other states, the nation has ceased to be. When nations go to war to destroy nations the ruin is complete. The failure of the principle of nationality as a necessary and sufficient basis of political union is manifest today. But in the absence of a more rational or popular principle, nationality with all its dangers and inadequacies must prevail. Therefore the political animal instead of blaming nationalism which is the cause of his present agony blames

representative democracy and turns against it. It is not surprising that when the foundations of society are crumbling, people should be occupied with the reform of mere government. It might be urged against the critics of democracy that representative democracy is only a mechanism for the expression of the general will and it cannot create a general will where no such will is to be found. In an entirely rational world of intellectuals democracy would be acquitted and nationalism banished. Societies, however, detect the scapegoat by a sure instinct and nations in distress invariably pervert or overthrow their democratic institutions. Rid of a machine that would not work a miracle, they subside into an artificial unity imposed by a dominant group which has cultivated the will to power and seeks to encourage in its subjects the will to believe. In the end, new political myths may take the place and even the name of democracy and nationality.

In colonial countries feelings of nationality are easily engendered. Common and reluctant subjection to a foreign power makes a nation of the people inhabiting a centrally administered territory. What cost much to free peoples comes gratis to their subjects. A people demanding freedom and self-determination cannot imagine a native government that is not from the outset democratic. So nationalism and democracy are intertwined in the affections of a people aspiring, or even struggling to be free. But the vicissitudes of democracy and nationalism are the same all the world over; in fact transplanted ideas go through the natural cycle of their lives with sensational rapidity.

India is no exception to the rule, though patriots of no country can be got to deny the uniqueness of their land. When India came under British rule, it was inevitable that her political structure should be determined by Western

When Macaulay triumphed over the Orientals, it was inevitable that the educated classes should seek for their home-land the institutions they had been taught to love and admire. Raja Rammohan Roy complained that India was "a country into which the notion of patriotism has never made its way." A century later Jawaharlal Nehru could write, "Patriotism is not enough, we want something higher, wider and nobler." That is the measure of the distance travelled by the intelligentzia in the course of a hundred years, and proof of the success of western education. It is a popular superstition, impossible to eradicate, that our educational system was devised to produce and only turned out inferior employees of government and commercial offices. On the contrary it has produced in the past. and is still turning out in large numbers, young men and women equipped to meet all the needs of a healthy society. But in the strange political conditions of the early days, government distrusted the educated classes, for in the words of Grant Duff they were 'professional malcontents; busy, pushing talkers; intriguers and grumblers'. patriotism then made them unpopular with the rulers. They were also soon to lose the regard of the people; for the first fruits of the democratic theory they preached came to be a contemptuous rejection of the values they had learned to cherish. Nevertheless it was a growing class educated on western lines that propagated widely and planted firmly the notions of nationalism and democracy in this country.

The intelligentzia was from the beginning variously handicapped. Most of the educated men came from the poorer sections of the middle class and therefore lacked the local influence that would have made them an example to the countryside. They could not function as a leisure class. Nor could they obtain any position of power and real res-

ponsibility in the government of the country. They studied social and political theories out of textbooks; they scanned the administrative methods of the British Government; but of real politics and power politics they were altogether innocent. The ethical teaching they had absorbed at school and their native love of peace reconciled them to their lot. They had to take many things for granted and among them was the Government of India which was a gigantic administrative contrivance working so smoothly and with so much of Benthamite efficiency that no one asked where it got its power from. They saw the whole of India made one by a centralised system of law and government and understood the unifying effect of education in the English tongue. They could imagine a gradual Indianization of the personnel of government and a gradual association of the public in the councils of government. language of the educated men of the last ration shows how firmly they believed in the supreme significance of the administration and how careless they were of the tremendous but obscure processes by which nations come of age or perish. If the educated classes were unable to understand or control the political climate of the country, they at least kept alive in institutions of higher learning respect for law and constitutionalism and the liberal devotion to "fundamental human decencies."

The piety of the educated gave us the political vision of a united Indian nation stretching from the Himalayas to the Cape. The vision was to be realized by an education fitting the people to the service of a constitutional democracy. And the Government should itself undertake the tuition of its subjects enabling them to reach in time the level of a free, united and democratic nation. And this new nation was not to remain alone and friendless in a

hostile world; it would be a member of a great Commonwealth of Nations, a defensive league girdling the globe.

But when the first instalment of political power was bestowed on the natives of India, these noble academic theories had to retreat before the scramble which a coveted substance excites. Racial, territorial, economic, religious and linguistic interests manifested themselves and had to be acknowledged by the rulers and the ruled alike. Political India accepted a federal organization of the central government with its implications of territorial autonomy for several areas within the country. Nationalist political parties upheld many claims of language, culture and economic interests, in order to win a large following against the established order. Just as subject people get nationalism without tears, sub-nationalities acquire effusive recognition of their integrity and permanence from the government as well as from the rebels. It would be foolish to ignore the natural and legitimate expression of sectional interests; they represent real political forces which cannot be dissipated by assumed indifference or by vehement invective. Any one of them, and not necessarily the largest, may yet grow powerful enough to make and lead a real Indian nation.

Mr. Ruthnaswamy whose knowledge of the theory and practice of Government and Politics is unrivalled wrote in 1932, "If ever there was a country that was made for unity it was India. (But) the history of India is a continuous and complete denial of its geography." And in the epilogue to his treatise on *The Making of the State*, he expressed the hope that "the State that has at last been made in India may yet be the making of India." The duty of making the nation is here cast upon statesmen and adminis-

trators for in any sane order responsibility must go with power.

The late S. Srinivasa Iyengar told the Kumbakonam Parliament, "Let us firmly and ardently believe that, to whatever communities we belong, we Indians are all of one race and nationality; on that conviction of racial identity alone depends our salvation in this world, in the present and in the future." Here was an attempt to create a new myth which would unite all the citizens of India.

It is unlikely that practical politicians and busy administrators will find the time and opportunity to devote themselves to the service of Indian nationalism. It is even more unlikely that any one will persuade the Indian masses to see themselves as one race. Meantime, the recriminations of sectional leaders separate classes and groups more definitely from one another. Indian nationalism has nearly attained the status of a lost cause and the right to asylum in Universities.

In these distracted times it is the duty of schools of social studies in Indian Universities to train the generations that pass through them to look on the political scene with eyes of compassion and not of revenge, to keep the channels of understanding open, and to equip every cause with fair-minded advocates and willing servants. Even a hostile and uncomprehending community deserves the ministration of trained minds.

ANNAMALAI UNIVERSITY—LANDS AND BUILDINGS

By

DR. K. C. CHAKKO, B.A., D.Sc., (LOND.), A.M.I.E., (IND.), I.E.S., Principal, Engineering College, Madras

The lands belonging to the University now cover an area of 572 acres of which 100 acres were handed down with the Sri Minakshi College and the 168 acres were a gift by the Founder direct to the University and the remainder were acquired by the University. The area lies to the East of the Railway line at Chidambaram and is bounded on the other sides by the Uppanar and Khan Sahib Canals.

Owing to the difficulty felt in finding accommodation for the staff and students in the Town, four professor's and four lecturers' quarters and hostel accommodation were already built as part of the Sri Minakshi College. These, with the College blocks, coverd a plinth area of 71822 sq. ft. and cost 8 lakhs of rupees.

The establishment of the University as a Unitary Teaching and Residential Institution by the Act of 1929 not only made the existing accommodation utterly inadequate for the needs of a University. Accordingly, a programme of buildings, roads and other works was commenced and buildings covering an area of 273,361 sq. ft. and costing 12 lakhs of rupees have so far been completed. Though a few individuals regarded the expenditure as a waste of money, the University authorities consistently held the view that a reasonable amount of expenditure on Buildings and

other amenities usually associated with a University were absolutely essential. The new buildings include a Convocation Hall, Library and Administrative Block, an Oriental Block, four new Hostel Blocks, a Union Hall, a Music College and a Guest House. There are now quarters provided for 100 members of staff and 60 menials. A few figures regarding the buildings are given in the Appendix.

The growth of the University in the first ten years of its existence has been so rapid that the Building Schemes and the provision of amenities could not keep pace with the needs of the expanding University. Thus the number of students rose from 771 to 983 in the three years ending 1940 and by the construction of four new hostel blocks, the accommodation was sufficient for only 651 students.

The essential needs for the present size of the University have been practically supplied excepting the Water Supply and drainage schemes. With the rapid increase in expenditure consequent on the constant expansion of the University, and the added difficulties caused by the present war, it has become necessary to temporarily stop the expansion and begin a period of consolidation. It is hoped that before long, the University will begin to grow again with renewed vigour until it attains its full maturity.

There are at present 18449 feet of roads as against 4480 feet in the pre-University days. Of these, 7466 feet have been tarred and it is proposed to tar the remaining portions also in due course.

There was no garden worth mentioning before the University was established. Since then 967,600 square feet of area, *i.e.*, nearly 22 acres, have been converted into gardens and playgrounds and this area is being gradually extended.

The beginnings of a protected water supply scheme have also been made. Water from the Usuppur channel is led by an open channel, one mile long, into two sedimentation tanks each capable of holding over three million cubic feet of water. From these the water is pumped through a pressure filter to an overhead tank of 25,000 gallons capacity. The hostel and 24 of the lecturers' quarters are now being supplied with filtered water. The water will soon be distributed to the areas through suitable pipes.

The drainage scheme for the whole area has not been taken up, but a scheme is in existence for the hostel and college blocks and the Hospital.

These works were in some cases carried out departmentally by the University Engineers but the more important buildings were constructed by experienced contractors. The plans and bills were scrutinised by distinguished engineers, such as Dewan Bahadur A. V. Ramalinga Aiyer and Dewan Bahadur N. Swaminatha Iyer, Retired Chief Engineers of the Madras P.W.D. and Rao Bahadur K. V. Natesa Iver, Retired Chief Engineer, Travancore State. The administrative block was originally designed by Mr. L. M. Chitale but during execution was modified by Messrs. Edwards Reid and Booth. The University Engineers in chronological order are: --Mr. K. Yegnanarayana Sastri, Mr. V. R. Subrahmania Iyer, Mr. S. Rangachariar, Mr. S. P. Raju Aiyer and Mr. J. Krishnamurthi and the contractors who carried out the major works are: -Mr. P. Rajabather Mudaliar. Mr. V. Subrahmania Aiyer, Mr. Kolandaivelu Mudaliar, Mr. N. Kandaswami Pillai, Rao Saheb S. Sambasiyam Pillai, Ratna Mudaliar and Santanam Aiyar and Messrs. Gannon and Dunkerley. The Engineer member of the Syndicate gave technical advice on engineering questions generally.

Although the standard of academic work carried out by the University may be regarded as an important cause for the prestige of the University, it cannot be denied that the buildings, roads, gardens and other amenities have also played a very great part in giving the University the importance it has attained.

APPENDIX

Building.		Cost. Rupees.	Date.
1. Library and Administrative	е		
Buildings		3,77,098	1937
2. Guest House		64,496	1938
3. Union Hall		19,805	1937
4. Music College and Music Ho	ostel	33,258	1937
5. Hostel Blocks, New		3,83,939	37-39
6. Pandits' Quarters		68,810	38-40
7. Vice-Chancellor's Quarters		63,842	1930
8. Lecturers' Quarters		1,55,698	30-37
9. Garrages & Tiffin Shed		11,160	1939
10. Post & Telegraph Office		11,236	1938
11. Professors' Quarters		1,44,938	30-37
12. Ladies Club	• •	15,000	1936
13. Hospital & an Isolation W	ard	26,550	36-37
14. Women Students' Hostel		32,160	1938
15. Menials' Quarters	. :	33,892	1938
16. College Buildings		5,24,305	24, 26, 32
17. Clerks' Quarters	••	10,875	1933
		19,77,062	

AN INTRODUCTION TO THE DRAVIDIAN FAMILY

By

MR. A. CHIDAMBARANATHA CHETTIAR, M.A.,

It is customary in the Science of language to talk of certain languages as constituting a family. By this metaphorical usage it is implied that certain languages, which may be called sisters, represent so many local developments of one language which may be regarded as their common parent. Pushing the figure of speech further one will find that the languages which stand in the relation of sister to each other are daughters of the assumed mother. The idea is that in the course of the development of a language it has taken upon itself several shapes through the working of different conditions in different localities and has consequently received several names. When a close examination of a number of languages indicates that they participate to a large extent in a common stock of words or root-elements of words, an inference is ordinarily made that the languages concerned may be descended from a common source. A comparison therefore of word-materials of languages would enable one in trying to determine the relationship that may exist between language and language. Because of such resemblances as can be explained only on the assumption that the languages are varied forms of a single older language, a notion is naturally formed that the languages in question may be historically related to each other.

Tamil, Telugu, Kannada, Malayāļam, Tuļu, Kudagu, Tūda, Kōṭa, Kurukh or Oraon, Malto or Rajmahal, Kūi or Khond, Gond and Brahui are languages which appear to

have belonged to the same stock, viz., the Dravidian. Though the term "Dravidian" is ill-considered, coming as it does from a foreign source, it has gained such rich currency and wide-spread usage as a common name for designating these languages that it is prudent now not to quarrel with the usage but to allow it to continue.

I shall make a short attempt in this paper simply to point out how these languages deserve to be brought under one family. While investigating the word-material of languages with a view to arriving at a relationship, it is necessary to take such words only as express familiar and ordinary things, creatures, operations and family relations and such words as are indicative of the numerals and pronouns. Such members of the vocabulary as are used everywhere by every one almost every day are of utmost importance from a philological point of view. "The 'language' consists to the philologist", as Dr. T. G. Tucker says, "of what is habitually spoken and habitually understood by the people at large." Words ordinarily used only by the learned classes or words of exceptional occurrence such as the strictly technical words of the arts and sciences are less important in a consideration of the question of ultimate relationship, for these are members of the vocabulary that are liable to be borrowed from foreign sources on contact with the foreigner.

Space would permit a comparison only among the chief languages and therefore Tamil, Telugu, Kannada and Malayalam alone would be taken now for the purpose. As words for familiar and ordinary things the following are found:—

ENGLISH	Tamil	Telugu	Kannada	Malayalam
	vīḍu manai		mana	vīţa
	il, illam	illu	mane	illam

SALT IRON	uppu irumpu karumpon	uppu inumu	uppu kappina	uppa irimba
STONE HILL	kal malai kunru	kallu koṇḍa	kallu male	kalla mala
TREE	maram chedi	Mrānu cheţţu	mara giḍa	maram chedi
FLOWER	рū	pūvu	hūvu	рũ
ARROW BOAT	ampu paḍaku	ampu paḍava	ampu	ampa
	valļam tōņi		dōņi	vaļļam tōņi
BONE	enpu elumpu	emuka	elume	elumpa
BLOOD	neyttór kuruti chennīr	netturu	netturu ke <u>n</u> nīru	chōra

It could be shown according to definite rules governing phonetic changes that these are various forms of the same word in each case. A final "ai" of Tamil ordinarily changes into a final "e" in Kannada as in the words "talai" (=head) and "Karai" (=bank) which become "tale" and "kare". Thus the change from "manai" to "mane" is explained. "Il" of old is retained in Tamil as it was, whereas it has become "illu" in Telugu; this can be explained by means of stating that there was a tendency among certain speakers to affix a vowel, generally u, to the conscnantal ending of words for the sake of euphony. Witness for instance words such as kallu, mannu, ālu etc. in Telugu standing in correspondence with Tamil kal, man, āļ etc.

Among familiar and ordinary things must be included words relating to the parts of the body and to the Five Elements.

English	Tamil	Telugu	Kannada	Malayalam
HEAD	talai	tala	tale	tala
HAND	kai	chēyi	kayi	kai
FOOT	aţi	aḍugu	aḍi	ați
EYE	kaņ	kannu	kaṇṇu	kaṇṇa
EAR	chevi kātu	chevi	kivi	chevi kāta
TOOTH	pal	pallu	hallu	palla
BACK	mudugu	•	1	muduga
	ven	bennu	bennu	
EARTH	nilam maņ	nela mannu		maṇṇu
	pudavi	puḍami	podavi	manna
WATER	nīr	nīḷḷu	nīru	nĩr
FIRE	neruppu	nipp u		
			tī	tī
AIR	к āl ka <u>rr</u> u	g āli	ghali	kāţţa
SKY	vāṇam viņ	minnu	bānu	vānam
	•			

It could be shown here too that in each case the change is due to the operation of certain phonetic principles. For instance, in accordance with the well-known law of palatalisation a primitive "kevi" has changed into "Chevi" in Tamil, while Kannada retains a form (Kivi) which is truer to the original. Because of the longness for aspiration which a certain set of speakers developed, "pai" of old became "hal" (and later hallu) even as words such as pattu, puli and pambu have changed into hattu, huli and hāvu. Due to the common tendency of eliding a "r" sound in mediai places as in erumai (—butialo) becoming emme in Kannada, Nerunal becoming Nennal in Tamil and Ninna in Telugu-Kannada, Neruppu has been changed into Nippu in Telugu.

Familiar creatures such as cow, fish, elephant and snake have words in these languages which have similar shapes. Ä,

mīn, Yānai or ānai and pāmbu are found in one shape or the other in these languages answering to the names of these creatures.

Again, such common actions as eating, giving, going etc., are expressed almost by similar words:—

English	Tamil	Telugu	Kannada	Malayalam
EAT	ti <u>n</u> uņ	tinu	tinnu	tinnu unnu ·
GIVE	ī tā koḍu	īchchu	ī koḍu	taru kodukka
GO	pō	pōvu	hōgu	pō
LAUGH	naku chiri	navvu	nagu	chirī
STAND KNOW	ni l teri	niluchu teli	nillu tiļi	nilka tiri

Among words indicating family relations what a remarkable similarity is found!

English	Tamil	Telugu	Kannada	Malayalam
FATHER	tantai appa <u>n</u> atta <u>n</u>	tan dri ap pā	tande appā	achchan
MOTHER	tāy ammai taḷḷai	ammā talli	tāyi ammā	ammā talļā
SISTER (elder)	akkai	a kka	akk a	ak ka

Numerals and pronouns, which are generally persistent and which therefore are sure to shed much light on determining the question of relationship, are also found to have the same or corresponding shapes in these languages.

English	Tamil	Telugu	Kannada	Malayalam
ONE	oṇṇru	oņ ḍu ok ați	ondu	oṇṇu
TWO	iraṇḍu	reņdu	eraḍu	reņḍu
THREE	mūnru	mūḍu	mūr u	mūnnu
FOUR	nāl u nāngu	nālugu	nālu	nāl
	nālgu		nālku	
FIVE	aindu	ai d u	aidu	
,	añcu			añju
SIX	āru	āru	āru	āŗu
SEVEN	ēļu	ēḍu	ēļu	ēļu
HUNDRED	nūru	nūru	nūr u	nūru
I	yān	ēnu nēnu	yān nānu	ñān
	n ā n			-
YOU	nī	nīvu	nīnu	nī
THEY	avar	vāru	avaru	avar

Each one of the changes noticed in the foregoing sets of words can be phonologically explained. For instance, by means of what is known as the principle of compensatory lengthening, in a word like "avar" which stood as "avaru" by receiving an euphonic vowel addition at the end, the initial vowel a migrated from its place and took the place of the succeeding vowel "a" with an increase in quantity as a matter of compensation for what it had lost. Hence vāru of Telugu and Avar of Tamil are ultimately related.

Though words of the class mentioned above would help one in determining the relationship, they alone do not suffice to prove it. If this evidence is corroborated by evidence from grammatical structure, one could say that these languages do belong to the same family. The main principle underlying the grammatical structure of all these languages is what is called agglutination, i.e., gluing together of elements that are attachable and detachable at will. This then helps us in establishing that the languages mentioned before are

members of the family generally known as the Dravidian. In order to show how these languages are similar in grammatical structure one sentence will now be cited. The English sentence "He said, o father, give me my share of the property" would be rendered into the four main languages thus:—

Tamil—Tandaiyē, cottil enakku varavēņdiya pankai enakku taravēņdum enrān.

Telugu—ō tanḍrī, āstilō nāku vachchē pālu Yimmani cheppināḍu.

Kannada—Tandeyē, āstiyalli nanage baratakka pālannu nanage kodu andāga.

Malayalam—Appā, Vastukkaļil enikku Varēņdunna pange tarēņamē ennu paraññu.

Tandaiyē of Tamil and tandeyē of Kannada agree in adding a final ē as the vocative. Appā of Malayalam is exactly in line with the other way in which Tamil would form its vocative, namely, by dropping the final "n" in such places and affixing instead ā. The Telugu tanḍrī also is analogous to the formation in Tamil by elongating the final short "i" as in "talaivī" from "talaivi."

Tamil cottil=cottu+il (the sign of the 7th case); Telugu āsti+lō (Here lō is but an inversion of ul, another sign of the locative in Tamil); Kannada āsti+alli (Here "alli" is a morphological element derived from an old independent word meaning 'that place' and serves very well to express the idea of the locative); Malayalam Vastu+kal+il (Here kal, the pluralising particle and il, the locative sign have been glued on to the root-word).

Tamil enakku and Malayalam enikku are but phonetic variations of the same inflection. It is significant that ku or gu or ge is the element expressive of the idea of the 4th case in all these languages. While Tamil and Malayalam have formed an inflexional base "en" by shortening the root-vowel in Yān or ñān and while Kannada has formed the base nan from nān by shortening the vowel, Telugu has retained the included vowel intact. So, nāku from Telugu nā, nanage from Kannada nān, enakku an enikku from Yān have been formed as the dative of the first personal singular pronoun.

Even as "ai" in Tamil "pankai" has been suffixed to indicate the idea of the accusative or the second case, "e" has been affixed in the Malayalam word as "pange". Pangu and pāl are identical in meaning. While Kannada has pālannu from pāl+annu, Telugu generally uses pālu in the sense of share in the accusative without any affix therefor. This is in accordance with the usage noticed in other Dravidian languages which occasionally prefer not to affix any accusative case-sign to neuter nouns. [E.g. Tam. Undi Koduttān =He gave food.] Dr. R. Caldwell, the founder of Dravidian Philology, remarks "the use of the nominative as the accusative of neuter nouns is the ordinary and almost universal colloquial usage of Tamil-Malayalam, and is often found even in classical compositions. . . . In Telugu the use of the nominative for the accusative is confined to things without life..... As far as things without life are concerned, Telugu adheres to the ordinary Dravidian rules."

Comparisons and considerations such as these point to the conclusion that these languages are in the relation of sister to one another and that they have sprung from the same mother, which may be designated as the *Primitive Dravidian*. Apart from the fact of history according to which there was a Dravidian race, the fact that there is great similarity in the *material* and *method* of expression in these languages renders the existence of a Dravidian family certain. As the pressing necessity of space compels me to draw this paper to a close, I would simply conclude by saying that the subject of study relating to the Dravidian family of languages deserves further and greater encouragement, for it is sure to shed a flood of light on several dark corners in the history of thought relating to General linguistics and that, as *Dr. W. W. Hunter* of the Bengal Civil Service said, it is destined to open the door to the vast linguistic residue and to furnish the basis of a new Science of Language.

STATE INTERVENTIONISM

By

V. L. D'Souza,

Professor of Economics, University of Mysore.

During the last quarter of a century partly under the stress of the Great War (1914-1918) and partly under the stress of the Great Depression (1929-1935) almost every country has engaged in some form of economic effort to promote industrial prosperity. It is evident that a good many of the measures have been in response to temporary emergencies while others have come to stay. It is worth our while to review the whole sphere of State action as it stood at the beginning of the present war and to take note of the various possibilities for Government intervention in the economic life of India that such a survey will reveal.

Economic action on the part of the State can take either of two main forms. In one the Government takes charge of the whole economic process and operates a planned economy. In the other Government action and private enterprise go hand in hand. The U.S.S.R. falls into the first of these categories. The remaining countries, about 65 in number fall into the second. We are not concerned at present with planned economic systems. Our survey deals with the methods of State action in capitalistic countries where private initiative still plays the major part in the making and marketing of goods.

Even under a system of the most complete laissezfaire the Government has a certain economic role to play. It is the extension of the role and also its intensification that makes for planned capitalism. There is a growing belief that it is the duty of the state to see not only that nobody starves but to ensure that the economic machinery of society runs smoothly and efficiently and that in particular it affords adequate employment for men and capital alike. The prevalent notion is that it is necessary for the state to take over a large measure of social responsibility and to improve the standard of living of the mass of the population. State action in the industrial sphere has won the approval of the Conservative as well as the Liberal.

It is difficult to cover the whole ground of State action within the limits of a short essay. We can give only the barest indications of the multitudinous forms of State intervention. We cannot go into the details of any particular scheme or project but we can make an attempt to see the movement as a whole or to vary the metaphor, to bring the different types of action into focus simultaneously.

STATE AID TO INDUSTRY

Even in the days of unadulterated laissez-faire the state rendered certain indirect aids to industry. Technical assistance such as the provision of business information, experimental farms, research institutes and State insurance had become a recognized part of official activity. During recent years financial aid to industry has become a marked feature. It takes various forms e.g. Government guarantee of the interest on loans and Government participation in the capital of the concerns. As extreme form is the Reconstruction Finance Corporation of U.S.A. which has made loans to or brought shares in industrial corporations and has thus kept businesses from tottering in a time of economic depression.

The most noteworthy of all types of State aid is the grant of bounties or subsidies. Even those countries where the laissez-faire doctrines are deeply entrenched have made subsidies quite a feature of their budgets. The Netherlands makes a large allocation every year for financial assistance to market gardeners, bacon producers and exporters of dairy produce. Great Britain makes a grant of £ 3 millions to the growers of sugar-beet while Japan subsidises the associations of small producers. In addition there are a great many disguised or veiled forms of bounty: remission of taxation, reduction of freight charges and special rates of exchange.

STATE MANAGEMENT OF INDUSTRY

One brought up in the school of orthodox economics scarcely realizes the extent to which Governments are now taking a hand in the making and marketing of goods. The old notion that there is no middle way between private enterprise and state ownership has been superseded. In practically every country private undertakings and state enterprises are found side by side. The mixture of industrial activity emanating from the capitalist and the Government constitutes a new situation.

State intervention in economic life may take one of many forms. It may amount to the actual management of business enterprises by a Government agency. Industries of key importance such as iron and steel in Japan and public utilities such as electrical supply in Great Britain have become the proper subjects for state management. Sweden has made a speciality of State purchase of wholesale drug and medicine houses while the Government in U.S.A. has created a network of State enterprises, called the Tennessee Valley

Authority, which serves as a yardstick by which to measure the costs in similar groups of industries under company management. The most successful method of State management of industry has been the "public corporation" under which persons directly responsible for the actual administration of the business are appointed by the State but they are left free to run the undertaking in their own way within the limits prescribed by general policy. The public corporation type of State management is likely to grow in popularity as it appears to be a happy compromise between economic individualism and governmental regimentation.

STATE REGULATION OF OUTPUT

State regulation or adjustment of output involves price fixing and control of productive capacity. In a system where private enterprise and State action intermingle, the adjustment of output becomes a fairly easy problem. For economic equilibrium the various kinds of goods—capital goods and consumption goods should be produced in the right proportions. Whenever there is persistent disproportion in the production of particular commodities the state has to make the necessary adjustment.

Adjustment of output necessitates direct control on the part of Government of prices, production and productive capacity. The control of prices ranges all the way from general price control over practically all commodities as is the case in Germany to State action calculated to mitigate seasonal price changes, as for instance of wheat in Canada or coffee in Brazil. Apart from price fixing on behalf of the consumers with which we are not at present concerned, price determination by the state in the producers' interests has become almost a normal feature of some administrations.

A characteristic type of price fixing consists in the setting up of a price at which the Government itself guarantees to buy all that is produced as for instance the cereals scheme of Czecho-Slovakia. Another method of price control is that the producer sells at the market price, the state making up the difference between the price obtained and the price guaranteed e.g. the wheat scheme of Great Britain. Yet another method, illustrated by the butter scheme of Australia, is to fix a high price for the home market and subsidise the exports out of the surplus realized from the domestic consumers.

Government control of output has also been successfully attempted in recent times. We have to bear in mind that price control and output control are inseparably connected. Whether prices are fixed and the output is left to adjust itself to the situation or vice versa leads more or less to the same result, namely the restriction of output. State regulation of the amount produced has become an important device though at times it assumes fantastic shapes. The ploughing-in of over 10 million acres in U.S.A. in 1933 thereby carrying out a partial destruction of the cotton crop, the burning of coffee in Brazil to an amount exceeding one year's total world consumption and the slaughtering of cattle in Argentina and Hungary are but sorry examples of an operation whose primary object ought to be a planned restriction of output.

Even more important than the control of prices and of output is the State regulation of productive capacity. Regulation in practice means a reduction to the point where supply can meet the new demand conditions. Thus in U.S.A. the Government gives a subsidy for the restriction of wheat and cotton acreage and the French Government does the same for the vineyards. In Bulgaria and Czecho-Slovakia the Gov-

ernment prohibits the establishment of new factories or extensions in certain industries. A number of the industrial codes under the New Deal prohibit any increase in capital equipment until demand improves. The restrictionist movement may be carried to great lengths as in Germany where further investment in some thirty important branches of industry was forbidden, as it was thought the investment had already outrun the possible demand.

So much for methods of direct regulation. Government also exercises indirect control over prices, output and productive capacity and this kind of control is operated through associations of producers. The state as in Germany, might compel the formation of cartels, an important feature of which is to force the outsiders to join so as to obtain unity of management and economies of marketing. Or again the state, as in Poland, might promote schemes of self-government in industry by which the majority of producers in a given industry will have power to frame decisions binding on the whole body.

Government control creates the need for further and further measures as in a concentric circle. Control is contagious and a Government which sets about regulating prices, output and productive capacity will soon discover that there are hardly any frontiers to its activity. Thus a Government that determines the price of one product will be called upon, sooner or later, to determine the prices of connected and complementary goods. An intervention at any single segment of the price system can rarely be an isolated act for, its repercussions spread over a wide area.

Moreover if price is controlled output also must be controlled and restrictionism tends to grow. Thus the Government may be obliged to pass a measure to the effect that folds taken out of rice or wheat cultivation are not used

to grow sugarcane or rye and thus spoil the markets for these. Neither should the manufacturers, say millers, be ground between the upper stone of price-fixing regulations in favour of producers of wheat and the nether stone of price-fixing regulations in favour of consumers of bread. These difficulties do not dispense with the idea of State action but they call for caution and an application of economic judgment to Government intervention.

STATE ADJUSTMENT OF CONSUMER DEMAND

An analysis of the Great Depression revealed the existence of an almost infinite capacity to produce and despite huge populations, an insufficient capacity to consume. In other words production was running ahead of effective demand and the people though willing to buy had not the purchasing power. The best remedy for the imbalance between output and consumption seemed to be for the State to create and maintain effective demand.

The measures proposed to keep the industrial system on an even keel are classified as either contractionist or expansionist. The contractionist method relies upon a reduction in prices and costs. In practice it amounts to a diminution in the total quantity of money in circulation, increased taxation to balance the budget, diminution in state expenditure, reduction of interest on loans, scaling down of farmers' debts and wage-cutting under the initiative of the Government. Germany, Italy and France have tried Government policies tending in these directions. Their object is to reduce costs to the level of effective demand.

The expansionist method adopts the opposite line. It is based on the argument that if more and more purchasing power were placed in the hands of potential buyers prices would cover costs, surplus stocks would be sold, the unem-

ployed resources would be brought into active use. The demand would become effective to the point where consumption would be equal to the wealth produced. Under the influence of expansionist ideas Great Britain and the countries of the Sterling Bloc broke off from the gold standard and allowed their currency to depreciate or become cheap in terms of foreign currencies, while the United States without actually going off the gold standard reduced the gold value of her dollar. The expansionist process has been followed up by what is called "openmarket operations", that is to say, by the State Bank purchasing securities with a view to inject additional purchasing power into the monetary system. The process leads on to low interest rates and "cheap money" for the businessmen. The Government then goes a step further and borrows a part of the abundant supply of purchasing power and uses the funds for public works, relief schemes and social services. thus placing new money in the hands of potential buyers of goods. In Germany the measures for increasing effective demand were associated with a rigid system of price control with the result that the whole of the expansionist policy was directed towards increased activity. The expansionist ideas are tending to become a part of the permanent technique for business stabilisation.

STATE INTERVENTION IN FOREIGN TRADE.

Government interference in the conduct of international trade is of the utmost complexity. It takes various forms and most of these are interconnected with the various types of State action within the country itself.

The oldest and by far the most important method of State intervention in foreign trade is the regulation of imports and exports. On the imports side the chief motive of action appears to be restriction on the entry of foreign goods, prompted by a variety of considerations such as the desire to protect home industry from foreign competition, or as an offset against currency depreciation and dumping and as a preventive of an adverse balance of payments. The simple device of the tariff is now supplemented by quotas, licenses, prohibitions and blocked accounts.

In contrast to the restriction of imports every encouragement is given to the exports and among the measures thereof we may mention export subsidies, State credits to exporters, assumption by the state of the trading risks and the setting up of marketing organization under State direction. While in theory the advantages of free international exchange are conceded by all, each country overcome by fear of unemployment, of war and of exchange difficulties pursues in practice a policy of national self-sufficiency. Imports are suspect so long as effective demand in the home market is not sufficient to keep capital and labour reasonably fully employed.

THE CHRONOLOGY OF RAGHUNĀTHA ŚĀSTRI PARVATE AND HIS WORKS—BETWEEN A.D. 1821 AND 1859.

By

P. K. Gode, M.A.,

Curator, B.O.R., Institute, Poona.

According to Satischandra Vidyābhūṣaṇa¹ the date of Raghunātha Śāstri Parvate the author of the *Nyāyaratna* is "about 1815 A.D." Aufrecht² records the following Mss of this commentary:—

"न्यायरत्न" a commentary on the $Pa\tilde{n}cav\bar{a}d\bar{\imath}$ Section of the Gadādharī by Raghunātha Śāstrin. Hall p. 32, B. 4, 24, Ben. 198, 199, 205, 221. NP. I. 118, 124. Poona 550. Oppert. 190, 653, 1270, 3156, 3267, 5437. II, 7142, 7612, 8262. Rice. 112."

" न्यायरत्न" a commentary on Gadāhara's $Pa\tilde{n}cav\bar{a}da$ by Raghunātha Parvata (or R. Śāstrin) Hz. 978, p. 84, 1311."

History of Indian Logic, Calcutta, 1921, p. 487—
 "92 Raghunātha Śāstri (Parvata)
 (about 1815 A.D.)

He was a Maratha, who wrote a gloss on <code>Gadādharī</code> <code>pañcavāda</code>, while residing at Poona about 70 years ago." If Raghunātha lived 70 years ago from A.D. 1921 backwards we must suppose that he was living in A.D. 1850 or so. Dr. Vidyābhūṣaṇa, however, gives "about A.D. 1815" as the date of Raghunātha. These two dates viz., A.D. 1815 and 1850 will not contradict each other if we presume that Raghunātha lived, say, between 1800 and 1850.

- 2. CC. I, 309.
- 3. Aufrecht, CC. III, 66.

In the above entries of Aufrecht no reference regarding the date of the author has been recorded. Fitzedward Hall,⁴ however, while describing in Ms of the न्यायरन refers to its author as "Raghunāthā Śāstrin Parvatīkara, late of the Poona College." As Hall's Bibliography was published at Calcutta in 1859, he appears to have had some knowledge of Raghunātha Śāstri and his association with the Poona College earlier than A.D. 1859. Hall also refers to a lithograph copy of the Nyāyaratna made at Bombay in A.D. 1843. It appears that another lithograph copy⁵ was

- 4. Bibliography, Calcutta, 1859—Hell was "Inspector of Public Instruction of Saugor and Nerbudda territories." He describes a Ms of the कार्यस्व as follows: "Nuāuaratna—A Commentary on the Pañcavādī Sub-section of No. XLI by Raghunātha Sāstri Parvatīkara, late of the Poona College. This work was lithographed in Bombay in the Saka year 1765 or A.D. 1843; leaves 316 of the Ms. form, and four leaves of emendations."
- 5. This copy is found in the Viśrāmbāg Collection at the B.O.R. Institute (Govt. Mss.). It bears the number 550 of Viśrāma I and begins as follows:—

"श्रीगणेशाय नमः॥ श्रीमदुपास्यदेवताय नमः॥ नित्येछाकृतिचित्तौख्यं परभाणुकलेवरं । अन्यात्मादिजगद्धेतुं नमामि परमेश्वरं ॥ १ ॥ द्रव्यं निष्पाद्य तिस्मन् गुणगणमद्यस्कर्भ जातिं विशेषान् ॥ संबंधं चाप्यभावं सुरगृहनिरयौ बंधभोशाव कार्षोत् । एकोपि ब्रह्मविष्ण्वीश्वर विविधपदे गीयते धर्मभेदात् । तं सर्वज्ञं द्यालुं दुरितगिरिपविं मंगलायाश्रयामः॥ २ ॥ कृष्णभटयादिसंदर्भसिंधुसायासमंथनः। व्यायरत्नं समुद्भत्य प्रकटोकरवाण्यहम् ॥ ३ ॥ मीमांसान्यायपंचास्यराधवाचार्यसूरिणां। श्विष्यस्येषा कृतिभूयाद्रघुनायस्य सन्सुदे ॥ १ ॥

made at Poona from this Bombay edition of A.D. 1843 in Saka 1772=A.D. 1850 as will be seen from the colophon of the Poona lithograph edition.⁶ But a closer study of this

6. Ms. No. 550 of Viśrāma I ends as follows: -folio 330 नित्याण्वादि कियातक्योर्जीवेभ्यो भिन्न ईश्वरः । ज्ञानाद्यष्टगुणः पायाद्पायात्तर्कजाद्धिनः ॥ १ ॥ न्यायांभोधि निमज्जने क्षणमुखायासोद्धताच्छस्फुरत् । तर्कत्वेप्सितरम्यरत्नजलसन्मालर्पिता विष्णवे । श्रीशायापि निपातिता मतिमतां तकीधकूपस्खल-द्भीवाचामधिकंठमलपमतिभियोद्धारणीया नहि ॥ २ ॥ कार्ष्णभटयादिककोडमंथकोडीकृतिः कृता । रघुनाथेनालसानां तच्छीघ्रोपस्थितीप्सया ॥ ३ ॥ विशेषयंतु मत्योक्तान्विशेषांस्तर्ककर्कशाः । आर्या मारसर्यमुत्सार्य दृष्टवैतज्जातविस्मयाः ॥ ४ ॥ न्यायाक्रपारपारं गतमतितरणीन्मत्सरोद्रेकशून्यान् मान्यान्विज्ञापयामः सविनयमिहयन्न्यायरत्नेऽपबद्ध तत्संशोध्यं परेषामुपकृतिविधये संप्रवृत्तावयं यत् तस्मादेवात्र घाष्ट्रजीन्नन निजधिषणा प्रौढिसंदर्शनाय ॥ ५ ॥ शके बाण पडद्रीदुं संमिते मासि भादके। रघुनाथो न्यायरत्नं शोभक्रद्वत्सरे करोत् ॥ ६ ॥

इति मीमांसान्यायपंचास्य श्रोमद्राघवाचार्यशिष्यस्य पर्वते इत्युपनामक रघुनाथस्य कृतौ गादाथरी पंचवादिष्यण्यां न्यायरत्नाभिधायां पक्षताग्रंथांतर्गत-संश्यपक्षता समाप्ता । समाप्रेयं न्यायरत्नाभिधा गादाधरीपचवादिष्णणी ।

द्विसप्तसप्तेंदुं मिते शाके पूर्णाख्यपत्तन । अंकिता पाठशालायां टिप्पणीयं शिलासरै:

The chronogram द्वि सप्त सप्तइंड = Saka 1772 = A.D. 1850 which is the year of this Poona (पूर्णपत्तन) lithograph.

colophon shows that Raghunātha composed the Nyāyaratna in Saka 1765 represented by the chronogram "बाण, पड्, अद्भि, इंदु" in verse 6 at the end of the work. It is possible therefore, that Hall may have confused the date of composition of the Nyāyaratna viz., Saka 1765 or A.D. 1843 with the date of the lithograph copy. At any rate we have to believe in the testimony of the author who specifies the year (Saka 1765) called "Sobnakṛt" and also the month (Bhādraka or Bhādrapada).

In view of the above date of composition of Raghunātha's *Nyāyaratna*, viz., *A.D.* 1843, we find it impossible to accept the date of Raghunātha's death given by Pt. Critrāva Sāstri⁷ in his *Caritrakośa* viz., "about *A.D.* 1820."

7. Madhyayagma Caritra-kośa, Poona, 1937, p. 675—"रञ्जाश शास्त्रों पर्वत—(मृद्ध स. १९२० सुमार)"—He favoured intermarriages between the Brammin sub-castes, viz., Deshasthās, Kokanasthās and Karhadas. In fact he married girls belonging to these castes. He took sides in the dispute in the Husabinis tamily of Poona, which resulted in some scuffle. Raghunātha was prosecuted and sentenced to simple imprisonment for some years. During his imprisonment he composed a work called "श्वास्त्रपादभूषण" which is a commentary on the Bhagavadgua. This work has been published by the Anandashram, Poona, in their series. He wrote a commentary on the गदाधरोदस्वाद. He wrote also a work called न्यायरन. He was a pupil of the celebrated राधवाबार " (translation mine).

The editor has not specified the source of the above information. He appears to think that न्यायर्झ is different from गदाधारी-पंचवादटीका. In fact न्यायर्झ is the name of this टीका. Then again राकरपादभूषण is different from the Marathi commentary on the Bhagavadgītā called the भाषाविद्यस्ति which Mr. B. G. Tilak read out to his father during the latter's illness in A.D. 1872, in which year Mr. Tilak was only 16 years old (Vide गीतारहस्य प्रस्तावना p. 1).

Hall's remark of A.D. 1859 viz., "late of the Poona College," if considered along with (1) A.D. 1843 the date of composition of the न्यायरत and (2) A.D. 1850 the date of the Poona litho-copy of the न्यायरत made at the (Viśrāmabāg) Pāṭhaśālā, leads us to infer that the literary activity of Raghunātha may have commenced about A.D. 1820, the year about which Pt. Chitrāv Śāstri states he was dead. Perhaps Raghunātha may have been a teacher in the Viśrāmbāg Paṭha-Śālā, from which he may have retired about 1859 A.D. Apparently Hall knew his connection with the Poona College viz., the Viśrāmbāg Pāṭha-śālā before A.D. 1859.

In the Nyāyaratna (verse 4 at the beginning and colophon) Raghunātha definitely states that he was the pupil of राधवाचार्यस्हि who is called "मोमांसान्यायपवास्य". I am inclined to identify this राधवाचार्य with "राधवाचार्य रामानुजण" who was appointed by the Bombay Government as the first Principal of this Sanskrit College at Vishrāmbāg, Poona according to a letter dated 6th October, 1821. This राधवाचार्य issued Rules and Regulations for the guidance of teachers and students of the Sanskrit

^{8.} Vide, p. 45 of Peshwa Daftar Selections (No. 42—1934).

The teachers appointed by Government for the Sanskrit College were:— (१ विटलभट फाटक (२) माहादेवभट (३) मेघइयाम पाटक (४)अनंताच्यार्थ (for अलंकार, नाटक) (५) राघवाचार्थ (for क्याय) clause 10 of this letter reads:— राघवाचार्थ रामानुजण थोर विद्वान जाणोन पाटशालेत मुख्तसर केले आहेत, ते गुरूवर व विद्यार्थी यावर व शालेचे इलाखदार यावर हुकूम करितीललं

College under his own signature in a document dated 19th July 1322. In another document dated 17th July 1837 राघवाचार्य (along with वाळाजीपंत नात्, आवा पारसनीस, कासीपंत चंदरे) is referred to as advising Maharaja Pratapsinh of Satara to confess the charges brought against him. Messrs. Natu, Parasnis and Bandre and Rāghavācārya were pro-Government persons and consequently their advice was refused by the Raja of Satara who was not prepared to do anything against his conscience.

I am inclined to suppose that Raghunātha the author of the न्यायर्ज was a pupil of राघवाचार्य the first Principal of the Vishrāmbāg College which was started in A.D. 1821. "राघवाचार्य" taught न्याय in this College and produced able pupils like our Raghunātha the author of the न्यायरज्ञ and राकरपादभूषण. The chronology of the guru and the pupil may now be represented as follows:—

A.D.

1821—(6th October)--Poona Sanskrit College started by Government with राघवाचार्य as its Principal, and teacher in न्याय.

रघुनाथ पर्वते possibly joined at this time the above College as a student and studied न्याय under राघवाचार्यः

- 9. P. D. No. 42 (p. 49ff), Letter No. 9 dated 19—7—1822 "यादि विश्रामबागचे याडयांत पाठशाला धातलां आहे त्यास वहिबाटक-रण्याची कलमे शके १७४३ चित्रभानु सवत्सरे (p. 51) कलमे सहिराधवाचार्या मि॥ श्रावणशुध्ध १"
 - 10. Ibid., p. 106-Letter No. 56 dated 17-7-1837.

- 1821—(19th July)— राघवाचार्य issued Rules and Regulations for the teachers and students of the College.
- 1837—(17th July)— राघवाचार्य advises the Raja Pratapsinh to confess charges against him.
- 1843—(Month of Bhādrapada)— रघुनाथ पर्वते the pupil of राघवाचार्य composed his न्यायरतः
- 1850—A litho-copy of न्यायरत्न is prepared at the litho press of the College "अंकिता पाठशालायां टिप्पणीयं शिलाक्षरैः"
- 1859—Fitzedward Hall publishes his Bibliography at Calcutta in which he refers to रघुनाथ पर्वते as "late of the Poona College".
- 1872—Lokamānya B. G. Tilak reads out रघुनाथ's भाषावित्रृत्ति (commentary on Gīta in Marathi) to his father in his last illness.¹¹

The above chronology of Raghunātha's life and works is reconstructed on the basis of the Nyāyaratna, 12 the letters

- 11. Vide infra. foot-note 14.
- 12. In verse 3 at the beginning of न्यायरत our author refers to कृष्णमटी . Again in verse 3 at the end of this work we find this work referred to as "कार्णमटी" This work is a gloss on गदाचरी called गदाधरीकरिका by कृष्णमट आहे, a Maratha residing at Benares. This gloss has been printed in Telugu characters. S. Vidyābhūṣaṇa states that कृष्णमट died about 150 years ago," i.e., about A.D. 1770. (See p. 486 of His. of Ind. Logic). If this date is correct Raghunātha's reference to काष्णमटी in A.D. 1843 appears to have been made after about 133 years from the death of कृष्णमट.

in the Peshwa Daftar and Fitzedward Hall's remarks. We must now see what evidence is furnished by another work of Raghunāthā viz., शंकरपादभूषण represented by some Mss in the Catalogus Catalogorum of Aufrecht¹³ and by the printed edition of the work in the Anandashrama Sanskrit Series. It appears that Raghunatha composed a work in Marāthī also. This work is a commentary in Marāthi prose on the Bhagavadgīta called the भाषावित्रति and it will be of special interest to us in view of the fact that Lokamānya B. G. Tilak's first contact with the Gīta literature which later blossomed forth into his monumental work Gītārahasya in Marāṭhī, began with the reading of Raghunātha's भाषाविवृत्ति in A.D. 1872 during the last illness of Mr. Tilak's father 14 as stated by him in the Gitarahasya itself. In the Catalogue of Gujarat Mss by Bühler

- 13. CCI, 625—"হাঙ্কাবাৰম্বল" Vedānta, by Raghunātha B. 4. 98. Oppert 3226.II.5575.8374."
 - "B. 4.98"=p. 98 of Bühler's Catalogue of Gujarat Mss, Fasc. IV; Bombay (1873). Ms. No. 346— शंकरपादभूषण by रद्यनाथ, Folios 311 in the possession of संतोषराम देसाई of Bhavanagar.
 - 14. Gītarahasya, Prastāvana (p. 1) dated A.D. 1915-

"इसवी सन १८७२ साली वडील शेवटच्या दुखण्याने आजारी असतां भगवद्गीतेवरील भाषाविवृत्ति नावाची प्राकृतटीका त्यांस वाचृन दाखविण्याचे काम आमचेकडे आलें होतं, तेव्हां म्हणजे आमच्या वयाच्या सोलाव्या वर्षी गीतेचा भावार्थ पृणेपणें लक्षांत येणें शक्य नव्हतें तथापि लहान वयांत मनावर घडणारे संस्कार टिकाऊ असतम्यामुळें भगवद्गीतेबहल तेव्हां उत्पन्न झालेली आवड कायम राहून etc." Evidently Mr. Tilak's love for the Gitā began at the age of 16 on a perusal of Raghunatha's भाषाविवृत्ति. I am thankful to Mr. Achwal of Poona for drawing my attention to this important reference.

published in 1873 he notes a Ms of रघुनाथ's शंकरपादभूषण in the possession of a gentleman at Bhavanagar. It would thus be seen that the chronology of the works of our author so far known is capable of being represented as follows:—

न्यायरत्न —Composed in A.D. 1843. भाषाविवृत्ति¹⁵—Composed before A.D. 1872. शंकरपादभूषण —Composed before A.D. 1873.

15. Bhagavadgīta with भाषाविवृत्ति of रघुनाथशास्त्री पर्वते
Printed in the Vṛttaprasāraka Press of Naro Appaji
Godbole, Sadashiv Peth, Poona, Śaka 1809 (=A.D. 1887). This
Marāṭhī Commentary begins with 9 Sanskrit verses as follows:—
'अशिगोशाय नमः ॥ अथमंगलाचरणम् ।

आत्मतत्वं स्वप्रकाशं सुविचायं पुनः पुनः । कुर्वेहं भाषया व्याख्यां गीतायाः कृष्णतुष्टये ॥ १ ॥ येषां संस्कृतभाषायामभ्यासो नास्त्यथापि च । छंदोबद्धेषु प्रयेषु भाषया रचितेष्विपि ॥ २ ॥ तेषां गीतार्थबोधाय भाषयाऽनितिविस्तृतः । स्पष्टार्थः सुखबोधश्च दीपोऽयं क्रियते मया ॥ ३ ॥ शास्त्रिणो रघुनाथेन रामचंद्रात्मजन वै । अनेन प्रीयतां देवो भगवान् श्रोपितः स्वराट् ॥ ४ ॥ मोमांसान्यायपंचास्यराघवाचार्यस्रिणाम् । शिष्यस्येषा कृति भूयाद्रघुनाथस्य सन्मुदे ॥ ५ ॥

The last verse, viz., verse 9 in the above extract is exactly identical with verse 4 at the beginning of न्यायर् . From verse 4 we know that रामचंद्र was the father of रघनाथ.

The commentary ends as follows:-

''गीताशास्त्रस्य गूढार्थपकाशार्थं मया कृतः । भाषाविष्टाचिदीपोऽयमज्ञानावृत्तिनाशनः ॥ It will be seen from the data recorded above that Raghunāthā Sāstri, the son of Rāmacandra Parvate, flourished between A.D. 1821 and 1859 during the time of English patronage of Sanskrit learning at Poona. The view of Dr. Satischandra Vidyabhūṣan that this author flourished "about 1815" has been also refuted on documentary evidence. In the same manner the statement of Pandit Chitrāv Śāstri that our author "died about 1820" is incorrect because it is not supported by any document. Moreover, Raghunātha himself states that he composed his Nyāyaratna in Śaka 1765 i.e. in A.D. 1843. The present paper amply illustrates how our knowledge of authors and their works even of the last century is most inaccurate owing to the want of proper historical reconstruction on the strength of reliable documentary evidence.

श्रीकृष्णायार्षितो भक्त्या नीराजनपुरःसरं । अनेन प्रीयतां देवो-र्ह्वोपितः श्रीपितः स्वराट् ॥ "मीमांसान्यायपंचास्यराघवाचार्यसूरिणाम् । शिष्यस्येषा कृतिर्भूयात् रघुनाथस्य सन्मुदे ॥ इति ।

श्रीमद्भगवद्गीतायाः रघुनाथशास्त्रिकृतभाषाविवृत्तौ अष्टादशोध्यायः

समाप्तः ॥

SPORTS AND GAMES AT ANNAMALAINAGAR

By

L. K. Govindarajulu, B.A., B.L.

The University has been the centre of considerable athletic activities since its very foundation in 1929. A sound tradition of outdoor activities had already been set up in this place by the Sri Minakshi College, thanks to the far-sighted policy of the Principal, and the munificent patronage of the Rajah Sahib of Chettinad, the Manager. Cricket for lovers of the King of Games, Football and Hockey for the hardy and fleet-footed, Badminton and Volleyball for the less ambitious but active students, were all well-established games at the time the University came into being.

With the inception of the University, a programme of compulsory physical activities for all students was introduced, and every able-bodied student is required by the regulations to play some game or other of his own choice. Facilities have accordingly been provided for a very large variety of games and sports; and as many as fourteen clubs now form the Athletic Association of the University. Daily, the undergraduates may be seen taking part in the following games and sports activities: badminton, basketball, cricket, football, hockey, playground-baseball, quoits, tennikoit, tennis, volleyball, boxing, heavy gymnastics, group games of all types, and indigenous games. To these amenities are to be added shortly two very popular and useful kinds of sport, boating and swimming.

We owe all this great array of activities to the farsightedness and generosity of the Founder-Pro-Chancellor, whose interest in every aspect of modern education is well It is he who chose this "solitary, solubrious" and spacious corner of South Arcot for this famous seat of learning and art. It is he who planned its rapid development from a wide and barren sea of sand and swamp into a small paradise of gardens, mansions and playfields. Fields had to be raised and levelled, tanks, ponds and hollows filled up, and thousands of gaunt, ugly and useless trees felled down in order that the wide acres we now have could be used either for the active and healthy recreation of the undergraduates or for the creation of beautiful parks in which the pensive student may amble at will. The cost of all this was indeed counted; but, though high, it has been willingly and cheerfully met in order that this place may become a great and worthy centre of learning in Tamil Nad.

The Raja Sahib has given this place of his best, even in respect of games and sports. He has endowed attractive and valuable trophies, and for the award of these, annually inter-collegiate and inter-club tournaments are conducted in athletics, cricket and tennis. A big prize is annually given in his name to the best all-round student distinguishing himself in the sports and games competitions of the year. The amenities for boating now being added are entirely due to his kindly interest and guidance. That his interest in athletic activities as a means of education is great and sincere is further shown by a magnificent gift he has recently made to the Inter-University Board of India of a large and artistic trophy for Inter-University Athletics.

To the facilities we possess for games at the University, its numerous and spacious playfields, the large

pavilion, office-rooms for the staff, the boat canal and the boat-house, we owe a great deal to the successive Vice-Chancellors, Dewan Bahadur S. E. Runganadhan, the Right Hon'ble V. S. Srinivasa Sastri and Sir K. V. Reddi. These are due to their benign and active interest in games and sports. Physical activities at this place have also derived immense encouragement from the youthful and valuable co-operation of members of the Teaching Staff who have actively participated in the play of the undergraduates, and assisted them in its organisation and conduct.

Thus, sports and games have been a marked feature of our University life here. To the Founder who has made all this possible, may God be pleased to give a long life of service and ever-lasting happiness.

KARNA'S BURDEN

By

H. L. HARIYAPPA, M.A.

This short play which is ascribed to the authorship of the celebrated Sanskrit dramatist Bhasa glorifies Karna who figures as one of the great heroes of the Mahabharata. It is as exquisite as it is short. The chief theme is Karna's bounty which knew no bounds and which, for the very reason, made his name for ever "like the Sun, the Moon, the Himavan and the Ocean." To-day Karna's name is a household word signifying limitless generosity.

Our dramatist however has, in this little piece of hardly half an hour's performance, portraved the hero with a rare insight into the human mind. Karna's generosity was not an accident; it was not a freak of his nature. We find it fully supported by many a noble quality which makes him majestic as well as magnanimous. He was high born, valiant in fight and just and honest in conduct. But one thing was against him and that was Fate. He was Kunti's first born child by favour of the Sun-God. No more auspicious circumstance is needed for one's prosperity, but for Karna it proved otherwise. For fear of scandal Kunti cast the baby into the river. A charioteer, Adhiratha by name. rescued the child and his wife Radha became the fostermother. Thus nobody could tell Karna's lineage. In the eves of the world he was low born with no stake in society. But his personality and attainments were so irresistible that they caught the fancy of Duryodhana who elevated him to Kingship. No two friends could be more affectionate and true to each other. But in the scheme of the Mahabharata,

this friendship proved fatal to Karna. He came to be as much hated and despised as Duryodhana himself by friends and foes alike. How could a base born son of a charioteer enjoy such confidence with the King? Hence he should be humiliated—that is how he was looked down upon even by Duryodhana's supporters. And what about his generosity? Even this great virtue which the world praises so much turned out to be the blunder of his life. His own mother Kunti took advantage of it and extracted a promise that he would not kill the Pandavas except one and that he would not use the same weapon against a person a second time. No less than Indra played the trick on him to the utter disregard of all ethical principles.

It is indeed vain to suppose that Karna was all virtue and that his end was thoroughly undeserved; for, how can he be exonerated from the talsehood that he uttered, quite consciously, before Jamadagni's son? It may be his excessive enthusiasm to learn at the feet of the eminent sage or it may be a boyish wantonness that encouraged him to utter the lie. Nevertheless, it is an error which merited the sage's curse and which thereafter steadily worked the nemesis of our hero. Karna however reconciled himself to the unfortunate incident. He was consecrated on the throne of the Anga country, became famous for his skill in archery and valour in war and basked in the sunshine of Duryodhana's friendship.

Inspite of all the glory he earned, Karna developed a rather pessimistic outlook. He was inwardly smitten with remorse on account of his early misfortune. His education and training ended in the fatal curse of Parasurama. In life, too, he came to be associated with wickedness. Kunti, Bhisma, Krishna and others chose psychological moments to bring home to Karna that the Pandavas were his younger

brothers and that he was only out to kill his kith and kin. These crucial incidents in his life swayed heavily upon the mind resulting in an attitude of diffidence which ever and anon oppressed him. He often seemed to betray a deplorable weakness of will as much as magnanimity of nature.

At all events, therefore, Karna's is a great personality endowed with manly qualities and divine splendour. By the decree of destiny only his magnificent life turned out to be a tragedy. Truly his is an instance of the tragic hero as conceived by the Greeks; and Karnabhara can be described as a tragedy with all the appeal of its technique. Recently however, Mr. Pusalker in his Bhasa—A Study has expressed a view differing from the above opinion. He would not concede the title of a tragedy to the play though he is willing to perceive "a pathetic note pervading the whole play." He would have us further interpret the title Karnabhara as follows:

कणियोः भारभूतानि कुण्डलानि दत्वा कर्णेनापूर्वा दानशूरता प्रकटोक्षता । तार्माधकृत्य कृतं नाटकम् ॥

This appears to be a very far fetched explanation of the title which in simple terms means "Karna's Burden" (क्रांस्य भारः, तमांबद्ध्य कृत नाटक्स्।) which easily reminds us of Karna's task or responsibility as commander of Duryodhana's forces; he has also a friendly duty to discharge, that is to secure victory for Duryodhana. The title further suggests the heavy handicap under which the hero has had to fight the battle. The Sahrdaya cannot indeed afford to ignore the tragic appeal of Karna's character as brought out in the little play. The technical aspect of tragedy too is clear enough. It may however be urged that the theme of the play is the gift of the armour and the ear-rings, not Karna's end. True, that is the primary incident that is related in the piece, a large portion

of which is taken up by the episode. But ponder over it with due regard to the background on which it has been set. The sentiment of pathos is overwhelming. Karna finally bids Salya drive the chariot to where Arjuna is. That is enough to suggest the end of the great warrior. Need it be actually included in the play? We know that it is his final fight. The greatness and majesty of his personality have already been killed; only his mortal frame marches to the field to perish. Indeed, when fates are against what can poor souls do?

Tragic as his end was, Karna's fame will endure till the end of creation. The world has forgotten all that was possibly bad in him. His supreme self-sacrifice and unstinting generosity will stand unsurpassed for ever. Both by example and precept he has taught the world the spirit of sacrifice in these memorable words:

शिक्षा क्षयं गच्छिति कालपर्ययात् सुबद्धमूला निपतन्ति पादपाः । जलं जलस्थानगतं च शुष्यिति हृतं च दत्तं च तथैव तिष्ठति ॥ (Verse 22)

As Time lapses, learning fades, trees fall though deep-rooted and lakes dry up. But what is sacrificed and what is given will remain for ever. And again

> धर्मो हि यत्नैः पुरुषेण साध्यः भुजङ्गजिह्वाचपला नृपिश्रयः । तस्मात्प्रजापालनमात्रबुद्ध्या हतेषु देहेषु गुणा धरन्ते ॥ (Verse 17)

After all, man ought to strive in pursuit of Dharma. King's fortunes are wavering as the serpent's tongue. Therefore, in solely promoting public weal, while lives are lost, virtues will endure.

KARNA'S BURDEN

(The preliminary worship over, enter the Stage-Director immediately)

Stage-Director:

May God Vishnu (Bearer of Fortune) grant you prosperity—Vishnu, the slayer of gods' hostile hosts, whose Man-Lion form, men, women, gods, demons and the denizens of the nether-worlds beheld with amazement and who ripped open the bosom of the demon-king with his axe-edged claws.

This is what I would submit to the honourable gentlemen. Hark! what is it I hear something like a noise while I am engaged in making an announcement? Well, I'll see.

(In the wings)

Tell, O tell His Majesty the King of Anga.

Stage-Director:

Well, I understand:

In the tumult of battle, the servant perplexed, with hands folded, reports to Karna under Duryodhana's command.

(Exit)

2

1

End of the Prologue

(Enter the Soldier)

Soldier: Tell, O tell his Majesty King of Anga that the hour of battle is nigh.

With elephants, horses and chariots, arranged in battle under Partha's banner, the lion-like Kings in glee send forth their lion-roar; and he of the serpent-banner, world-famed warrior apprised of the situation, has set out in haste to battle which is dreadful with the enemies' war-cries.

3

(Stepping forward and looking about) Aye, here is the Anga King sallying out of his mansion. Accounted in full, he hies this way with King Salya. But what turmoil of heart, never before felt, for one who is known for his valour and who is prominent in the feast of war! For he—

> conspicuous by his dazzling brilliance, counted the first in battle and prowess, the skilled one arrives with sadness overcome. Karna in his native splendour now appears like the summer sun besieged by clusters of clouds.

4

Let me keep aside

(Exit)

(Enter as described Karna with Salya)

Karna: Not so: will these kings who cross my arrows' path ever have life left in them?
Good must be done to the Kauravas on the battle-front; only Dhananjaya must be seen.

5

King Salya, pray, steer my chariot straight to the place where Arjuna is.

Salya: Certainly (steers).

Karna: How strange!

In this hour of battle,
a sense of oppression lies heavy
on the mind even of me whose
prowess in great wars is like
Yama's in rage-wars
in which soldiers, horses,
elephants and chariots are hacked to
pieces by volleys of arrows on either side 6

How hard!

First-born of Kunti was I, then known to the world as a Radha's son; and that these Pandavas—Yudhishthira and others—are but younger brothers to me!

7

8

Now has befallen the moment that augurs well for me. The great day is come. But alack, vain is the weapon I learnt to wield; and besides am I prevented by my mother's words.

O King of Madra, pray listen to the story of my weapons.

Salya: I am eager too to hear the story.

Karna: Once before I went to Jamadagni's son.

Salya: What then?

Karna: Then-

going thither I bowed and humbly stood before the great sage, crest of the Bhrigu race and foe of the Kshatriyas, with matted locks tawny like the lightning creeper, and bearing an axe enveloped by the halo of its radiance

Salya: And then.

Karna: Then Jamadagni's son blessed me and asked
—who art thou? and what brought thee
hither?

Salya: And then.

Karna: 'Holy Sire, I desire to be instructed in all the weapons' said I.

Salya: And then.

Karna: Then spoke the sage 'Only to the Brahmans will I impart instruction, not to the Kshatriyas.'

Salya: Yes, there is that old enmity that the sage bears to those of the Kshatriya race. Then?

Karna: I averred I was not a Kshatriya, and began to take lessons.

Salya: Then:

Karna: Then after some time, I once went with my teacher to fetch fruits, roots, flowers, dry twigs and kusa grass. Weary with wandering in the woods, the master fell asleep on my lap.

Salya: And then.

Karna: Then-

A certain insect with a sting hard as diamond

unfortunately bored both my thighs; with fortitude however, did I endure the pain, lest I

disturb my master's slumber. Wet with

blood he woke up suddenly and found me out.

Inflamed with rage, he cursed me—
let thy weapons fail thee in thy hour of
need.

Salya: Alas, the holy sage spoke sternly.

Karna: But let us verify the story of the weapons.

(Doing so)

These weapons seem to be powerless!

Besides—

With eyes blinded by despair faltering again and again having lost control, these steeds, and these elephants too—with icher smelling like the *Saptacchada*—seem to forebode retreat in battle.

The conches and the drums have also been silent!

Salya: 'Tis hard indeed!

Karna: King Salya, enough, enough with this despondency.

Killed in battle one attains heaven; victorious, of course, one wins glory. Both are highly commended in the world. Hence, to fight is not in vain.

And Again-

these steeds of excellent Kamboja breed have never disappointed my hopes in wars. In speed they are equal to the King of Birds.

Surely will they protect us if need be at all.

13

Prosperity be to the kine and Brahmans; Prosperity be to virtuous wives; Prosperity be to warriors who do not retreat in battles and good luck be to me whose hour is come. Here I am, pleased.

I will straightway rush to the Pandavas' fierce battle-front and capture King Dharma, famed for many virtues. And felling Arjuna with my swift arrows will I make the field easy of access even as a forest when the lion is killed.

14

King Salva, we shall mount chariot.

Salya: Certainly. (Both feign mounting the chariot)

Karna: King Salya, pray steer my chariot to the place where Arjuna is.

(In the wings.)

O Karna, a great favour do I beg of thee.

Karna: (Listening) Aye, it is a powerful voice!

Surely a nobleman he, not a mere Brahman,
as there is great majesty. Hearing his sweet
and dignified voice, these courses of mine,
losing control over their bodies,
stop movement all on a sudden. They

stand, as in a picture, with ears erect, eyes steady and

the forehead winding to a side with the neck.

Call the Brahman. No, no. I will myself call him.

Your worship, this way please.

(Enter Indra in the guise of a Brahman)

Sakra:

O Clouds, return ye with the Sun. (Approching Karna) O Karna, a great favour do I beg of thee.

Karna:

I am very pleased, Your Worship.

I am now to be counted among the blessed in the world. Here do I bow to you--

I, Karna, whose lotus-feet are illumined by the gems of the coronets of kings

but whose crown is now hallowed by the dust of a worthy Brahman's feet. 16

Sakra: (To himself) what shall I say now? Should I say 'live long' long will he live. Should I not, he would scorn me as a fool. Avoiding both what then shall I say? Well, I have it. (Aloud) O Karna, as the sun, the moon, the Himavan, the ocean, let thy fame endure.

Karna: Holy sage, would you not wish to say 'live long'? Rather this alone is worthy. For—
[After all, man ought to strive in pursuit of

Dharma.] King's fortunes are wavering as the serpent's tongue. Therefore in solely promoting public weal, while lives are lost, virtues will endure.

Your worship, what would you desire and what may I offer you?

Sakra:

A great favour do I beg of thee.

Karna: Yes, I will grant you the great favour. Pray listen to what riches I have.

I would confer upon thee a thousand cows excellent and sacred, with horns decked with gold; young, beautiful and much coveted by those in need; yielding a stream of nectar-like milk, after their calves are suckled to contentment

Sakra: Cows a thousand! Their milk I may quaff for a while. No, Karna, I do not need.

Karna: Your Holiness would not have it. Pray listen to this.

I would at once give away thousands of steeds of excellent quality comparable to those of the sun. As instruments to kingly fortune they deserve to be highly regarded by the princes; their mettle is tested in battle; and born as they are of the famous Kamboja breed, they equal the very Wind in velocity.

Sakra: Horse? For a while I ride on it. No Karna, I will not have it.

Karna: Your worship won't have it, Pray listen yet further.

I would give you many a herd of these elephants, of tusks and toe-nails shining, able to rout the enemy in battle. Their temples streaming with ichor, the bees gather about them in swarms. Further, they would look like a huge range of mountains and trumpet deep and resonant as the clouds.

20

Sakra: Elephant? for a moment would I ride. I

like not, Karna, I like not.

Karna: Your holiness wouldn't have that either. Pray, listen again. Gold beyond count, I

would give you.

Sakra: I take and go. (Pacing some distance) No, I like not Karna, I like not.

Karna: Then will I conquer the Earth and give you.

Sakra: What shall I do with the Earth?

Karna: Then, I would make over to you the fruit of Agnishtoma.

Sakra: What is the use of the fruit of Agnishtoma?

Karna: Then, I give you my head.

Sakra: Alas, Alas!

Karna: Fear not, fear not. Pardon me, Holy Sir,

pray, listen yet.

Born with my own person, this armour is protection to my body. Neither gods nor demons could pierce it with all their weapons. Yet I would with pleasure part with the armour and also this pair of ear-rings should your worship so desire.

21

Sakra: (Gleefully) Give, do give.

Karna: (To himself). This after all was his end and aim. Could it be the cunning of that highly deceitful Krishna? May be. Fie! It is unworthy to bewail what is past. There is no doubt. (Aloud) Pray accept.

Salya: Give not, O King of Anga, give not.

Karna: Don't you prevent me, King Salya. Look
With the lapse of time, learning suffers
decay, trees fall though well-rooted;
water even in springs and lakes dries up
But what is sacrificed (into the fire)
and what is gifted away (to the needy)
will remain for ever.

Hence, please accept. (tears open and gives).

Sakra: (To himself after taking) Well, the two things have been taken. I have thus accomplished what all the gods proposed to do for Arjuna's victory. Let me now mount the Airavata and witness the grand duel between Arjuna and Karna. (Exit.)

Sailya: O King of Anga, pity thou art deceived.

Karna: By whom? Salya: By Sakra.

Karna: Not indeed. Sakra, on the contrary, has been deceived by me. Because

With offerings at many a sacrifice the twice-born seek to propitiate him. Hosts of demons are crushed by him; he punished Paka. Constant patting on the back of the divine elephant has

hardened his fingers. Arjuna is his son. Such a one has, through me, gained his purpose!

23

(Enter divine messenger in a Brahman's garb)

Divine Messenger: O Karna, thou hast been blessed by Purandara who regrets for having taken away the armour and the ear-rings. Pray, accept this unfailing missile, called Vimala, to slay one of the Pandavas.

Karna: Fie! I do not accept anything in return for my gift.

Messenger: Would you not accept by the Divine word of a Brahman?

Word of a Brahman? Never before have I Karna: transgressed. When may I have it?

Divine Messenger: Whenever you think of it, you have it.

Karna: Very well. I am beholden. Dost thou return.

Divine Messenger: Certainly. (Exit.)

Karna: King Salya, let us mount the chariot.

Salya: Certainly. (They feign mounting the chariot.)

Karna: Aye, I hear something like a noise. What could it be?

> It is the blast of the conch, resembling the roar of the Ocean of Doom. Is it Krishna's? It may not be. It is Arjuna's. Enraged at the defeat of Yudhishtira, indeed, Arjuna will fight with all his might.

24

King Salya, pray, steer my chariot to the place where Arjuna is.

Salya: Certainly.

(Epilogue)

May prosperity reign everywhere. May adversity vanish for all time. May our Sovereign full of Kingly virtue, alone, rule the Earth.

(Exeunt.)
FINIS.

THE LOVE LETTERS OF RICHARD STEELE

By

K. P. KARUNAKARA MENON, M.A.

Steele, the father of the periodical essay, the collaborator of Addison in the *Tatler* and the *Spectator* is a familiar figure, but Steele the passionate, faulty but loyal-hearted lover, the author of the exquisite letters to his wife, is comparatively unknown. Of the great love-letter writers in English Steele alone represents the typical eager wooer and devoted husband, "hoping and worshipping doubting and quarrelling—now in the seventh heaven of delight, now crying in outer darkness—always thinking of the beloved with a boy's heart and a man's care."

The object of his love is Mary Scurlock, a Welsh lady of some property and considerable personal attraction. "She was a brunette, with a rather high forehead, the height of which was ingeniously broken by two short locks upon the temples. Moreover, she had distinctly fine eyes, and a mouth which, in its normal state must have been arch and pretty." Steele falls a victim to her charms within a short time after the death of his first wife who, on his own authority, "had so extreme a value for him, that she, by fine, conveyed to him her whole estate." The passion is reciprocated by Miss Scurlock, who, though less impulsive than her wooer, is not less keen on the marriage. The letter that she wrote to her mother seeking the latter's consent and blessing reveals her opinion of Steele.

"But he has a competency in worldly goods to make easy, with a mind so richly adorned as to exceed an equivalent to the greatest estate in the world, in my opinion: in short, his person is what I like; his temper is what I am sure will make you, as well as myself perfectly happy, if the respect of a lover, with the tender fondness of a dutiful son, can make you so; and, for his understanding and morals, I refer you to his 'Christian Hero' which I remember you seemed to approve.....What I desire is, your consent and blessing to my putting it out of my power to delay, and so perhaps to lose, my first and only inclination; for I shall never meet with a prospect of happiness if this should vanish."

Steele is a man of transparent sincerity. To affectation of every kind he is a total stranger. He repudiates the artificial language of romance from the first. "I shall affect plainness and sincerity in my discourse to you, as much as other lovers do perplexity and rapture. Instead of saying, 'I shall die for you,' I profess I should be glad to live my life with you." But the ardour of his passion gushes out in words throbbing with emotion. Like all fervent lovers he looks upon his beloved as a goddess, and his union with her as the consummation of human felicity.

"You are so good as to let me know I shall have the honour of seeing you when I next come here. I will live upon that expectation, and mediate on your perfections till that happy hour. The vainest woman upon earth never saw in her glasse half the attraction which I view in you. Your air, your shape, your every glance, motion, and gesture, have such peculiar graces, that you possess my whole soul, and I know no life but in the hopes of your approbation: I know not what to say, but that I love you with the sincerest passion that ever entered the heart of man."

He interrupts her sabbath meditations to tell her in a letter that "there is nothing but Heaven itself which I prefer to your love which shall be the pursuit of my life." Every moment of separation from her is torture to him, and he is so full of her that "his books are blank paper, and his friends intruders."

"Madam.

I lay down last night with yr image in my thoughts, and have awak'd this morning in the same contemplation. The pleasing transport with which I'me delighted, has a sweetness in it, attended with a train of ten thousand soft desires, anxieties, and cares. The day arises on my hopes with new brightness; youth, beauty, and innocence, are the charming objects that steal me from myself, and give me joys above the reach of ambition pride, or glory. Believe me, fair one, to throw myself at yr feet is giving myself the highest bliss I know on earth."

His was a whirlwind courtship. Nevertheless he grows impatient, and presses her to mention the happy day when he can call her his.

"Dear Mrs. Scurlock, I am tir'd with calling you by that name; therefore say the day in which, you'le take that of, Madam, your most obedient, most devoted humble ser'nt."

Again:

"Oh hasten ye, minutes! bring on the happy morning wherein to be ever hers will make me look down on thrones! Dear Molly, I am tenderly, passionately faithfully thine." At last the date of the marriage is fixed. It is to come off on Tuesday, September 8, 1707. The ecstatic lover is on the tenterhooks of expectation, and he can think of nothing else.

'Madam

It is the hardest thing in the world to be in love and yet attend businesse. As for me, all who speake to me find me out, and I must lock myself up, or other people will do it for me.

A gentleman asked me this morning. 'What news from Lisbon?' and I answered, 'She's exquisitely handsome.' Another desir'd to know 'when I had been last at Hampton Court?' 'T will be on Tuesday come se'nnight.' Pr'ythee allow me at least to kiss your hand before that day that my mind may be in some composure."

On the appointed day they "commit" matrimony, and Steele, in course of time, "dwindles" into a tame and submissive husband. He subscribes himself in his letters to her as "your happy slave and obedient husband," or "your most obsequious husband and most humble serv'nt." The letters are full of references to her as his "absolute governesse" and "ruler." He repeatedly acknowledges her sway: "You are the head of us and I stoop to a female reign, as being naturally made the slave of beauty." After these confessions we need not be surprised to hear Dean Swift writing to Stella: "He is governed by his wife most abominably, as bad as Marlborough."

But if she governs him it is well for him, for he is a most hopeless governor of himself. His improvidence in moneymatters is notorious, and he is no less aware of it than others. "I never can, I own....be what they call thoroughly fru-

gal." His sanguine Irish nature makes him mistake his expectation for his income. He lives mostly on airy calculations, and unfounded hopes of coming wealth. "T shall on Michaelmas day £593," writes the incurable optimist. Again, "Within a day or two I doubt not but we shall have our money, which will be the introduction to that life we both pant after with so much earnestness." And, "I have that in my pockett which within few days will be a great sum of money." He repeatedly assures her that the bargain he is making will keep them for ever from want, and once he promises her that she "shall be provided for better than any other family in England." Despite these extravagant hopes and promises he has to confess that "all his endeavours and thoughts tend only to extricate his condition." She is certainly more prudent than he, and that is why he calls her his "dear Prue."

Again, Steele loved, not wisely but too well, the drink that both cheers and inebriates. Without it he could not have been what he calls himself, "no undelightful companion," or what his wife describes him to be, "as agreeable and pleasant a man as any in England." It was a habit all too common in his age. Sir Leslie Stephen has classified the men of the eighteenth century into those who could drink two bottles of port after dinner and those who could not, and Thackeray has observed that the wits of the age of Queen Anne were fat: "Swift was fat; Addison was fat; Gay and Thomson were preposterously fat; all that fuddling and punch drinking, that club and coffee-house boozing shortened the lives and enlarged the waist-coats of the men of that age." Though Steele was not "a mountain of beef" (as Horace Walpole described a fellow diner at the table) there is no doubt as to which of the two classes of people mentioned by Sir Leslie Stephen he belonged. With the morning headache, a disease with which most of his contemporaries were familiar, Steele confesses his crime to his wife and promises amendment.

"I have been a little intemperate, and discomposed with it; but I will be very sober for the future especially for the sake of the most amiable and most deserving woman, who has made me her happy slave and obedient husband."

But promises are more easily made than kept. Many of the letters are written in drink. "I am, dear Prue, a little in drink but at all times yr faithfull husband." In one letter he subscribes himself "dead drunk" for love, another in toto is

"Dear Prue,

Sober or not, I am ever yours."

One need not be a prophet to guess in what condition Steele was when this letter was written. Equally obvious is the reason why many letters consist of illegible scrawl. It is well that a man so improvident and imprudent as Steele has his "Prue" to govern him.

Like all affectionate couples Steele and his wife frequently quarrelled with each other. Steele's irregular habits are a constant source of friction. He is often away from home, business and conviviality make him stay out at night. This "coquette of some years' standing," this "cried up beauty" must have found life with her incurably social, impractical and extravagant husband somewhat of a trial. Evidently she is vexed by his frequent absences, and one of Steele's letters written in an unusually serious and wounded vein shows that "his absolute Governesse" must have been exceptionally disrespectful and cruel. He returns the letter to her, complaining about her masterful ways and asserting

that though he loves her "better than the light of his Eyes or the life-blood in his Heart," he will be master of himself, that "his time and his will should be under no direction but his own." She must also have been guilty of inquiring too closely as to how he was spending his time, and of making him look ridiculous by "sending after him." How frequent these bickerings are is clear from what he once writes to her: "I wish I knew how to court you into Good Humour; for Two or Three Quarrels more will despatch me quite."

The embers of misunderstanding flicker and fade, and fade and flicker again, but the steady flame of his love never dims for a moment. If a frown or a hard word of hers sinks him into despair a smile or a compliment sends him into ecstasy. Once she addresses him as "dear Dick" in a letter written from Wales, and the enraptured husband declares that he could forget his gout and walk down to her from London. The letters are rull of instructions to her to take care of her health. "Pray wrap yourself very warm" is the refrain of many of his notes. Her report of "continuall pain" in her head gives him "sensible affliction" and he gives her his own recipe.

"I am confident that washing your head in cold water will cure you; I mean, having water poured on your head, and rubbed with an hand, from the crown of your head to the nape of your neck. When I lay in yr place and on yr pillow, I assure you, I fell into tears last night, to think that my charming little insolent might be then awake and in pain, and tooke it to be a sin to go to sleep."

Many of his letters are merely notices of little presents sent to her, "I enclose a guinea for your pocket", or"I send you some tea which I doubt not you will find very good," or again,

"Dear Prue,

I send you seven pen'orth of walnutts at five a penny which is the greatest proof I can give you of my being, with my whole heart yrs."

Before the letter is despatched he adds in a P.S. "There are but 29 walnutts." The next day he sends her "half an hundred more of walnutts." In all these letters we have the prose of love. "For thee I die, For thee I languish." he says in a short note of two sentences in 1712, six years after the marriage, and in 1717 he addresses her as "Ten thousand times my dear, dear, pretty Prue," and concludes another letter with "Poor, dear, angry, pleased, pretty, witty, silly, everything Prue, yours ever."

Steele's affection and respect for his wife do not appear surprising to us when we remember that it is he who in speaking of Lady Elizabeth Hastings, has paid the most handsome compliment that has ever been paid to a woman: "passion so high souled and graceful that to love her is a liberal education." As Thackeray has pointed out, Steele is the first of English writers who admired and respected women. While Congreve looks on it as mere instruments of gallantry, and destined like most fortifications to fall after a certain time before the arts and bravery of the besieger man, while Swift takes no pains to hide his opinion that woman is a fool, while Addison watches them as if they are harmless. half-witted pretty creatures made only to be men's play things, while Pope declares that "every woman is at heart a rake" hungry for pleasure and for gain, Steele alone pays a manly homage to woman's goodness and understanding as well as to her beauty and tenderness. "His breast seems to warm, and his

eyes to kindle when he meets with a good and beautiful woman, and it is with his heart as well as with his hat that he salutes her."

Steele's letters are also full of tender references to his children. "The children are almost always in my head at the same time as yourself," he writes to his wife. Again (playfully): "All my public spirit and gallantry is turned into the care of a wayward beauty called a wife, and a parcel of brats called children." Here is an interesting account of one of the sons by the affectionate father:

"Your son at the present writing, is mighty well employed, in tumbling on the floor of the room, and sweeping the sand with a feather. He grows a most delightful child, and very full of play and spirrit. He is also a very great scholar: he can read his Primer; and I have brought down by Virgil. He makes very shrewd remarks upon the pictures. We are very intimate friends and play-fellows."

Indeed Steele must have been a great favourite with his children of whom and of whose mother he was very proud. "Your son," he writes to Mrs. Steele, "is extremely pretty, and has his face sweetened with something of the Venus his mother, which is no small delight to the Vulcan who begot him."

Steele commits to paper every thought the moment it comes into his head. If any letters could be called unpremediated effusions, undoubtedly Steele's letters to his wife deserve the description. Many of them are dashed off in a hurry.

"I have but few minutes from the duty of my employment to write in, and without time to read over what I have writ; therefore beseech you to pardon the first hints of my mind, which I have expressed in so little order."

Sometimes he has "to steal a moment" from a friend who is with him and observes him in every gesture and motion, to tell "the charmer and the inspirer of his soul" that he is "her devoted, obedient servant."

The open hearted, unreserved, simple and affectionate nature of the man reveals itself in everyone of his letters. In fact, reading two or three of the short notes scribbled by Steele to his wife we get details for a mental portrait of the writer such as might be sought in vain in fifty essays of the Tatler. But when we read these tender and loving letters we feel even now as though we are unjustifiably prying into the writer's confidence. Steele expressly begs his wife "to show his letters to no one living," for the most excellent reason that "other people cannot judge of so delicate a circumstance as the commerce between man and wife." They answer to the definition of the true letter, a spontaneous nonliterary production, ephemeral, intimate, personal and private, a substitute for a spoken conversation." Well does Steele deserve to be remembered as the ideal letter writer no less than as the father of the familiar essay.

REVIEWS OF BOOKS

By

Prof. K. M. Khadye, M.A., (Cantab).

Nowrosjee Wadia College, Poona.

I deem it a very high honour to be called upon to write something for this Commemoration Volume. The services of the Founder of the Annamalai University to India have been so great that they deserve to be recorded in letters of gold. This duty I would naturally leave to the present workers in the University.

I have thought it best to write on Reviews of Books, because I wish the University had the opportunity to base its choice of Books for its Library on such reviews as I would look upon as ideal.

There was a time when the *Reviewer* thought that it was his duty and his privilege to show up the faults, and the faults only, of the books he had to review: to censure them or—what is virtually the same thing, if not worse—to damn them with faint praise. Bishop Coplelton had such reviewers in his mind when in the course of his satirical 'Advice to a young Reviewer' he said:—

"You will perhaps wonder why all my instructions are pointed towards the censure, and not the praise, of Books; but many reasons might be given why it should be so. The chief are, that this part is both easier, and will sell better."

To-day we have almost reached the other extreme. Books do not sell well unless they have a good press, and favouritism—or worse—has often resulted in an undue adulation of third rate stuff.

In either event it is the poor reader who suffers. Reviews have in these days become almost indispensable. Our very existence as men and women of culture depends on them. For, as Sir Arthur Quiller-Couch puts it: 'Man and this planet being such as they are, for a man to read all the books existent on it is impossible; and if possible, would be in the highest degree undesirable'.

We have to make a choice. And to whom shall we go, if not to the Reviewer for help in making our choice? 'Some books, Bacon tells us, 'may be read by Deputy'. of this type at least, we shall certainly have to depend on the Reviewer in these days—when the output of Books has been enormous and when our interests have been so varied. For such books and the literature of knowledge in general, what we expect from the Reviewer may be only a faithful and easily intelligible summary of the book he reviews. His task is easy, provided, of course, he is somewhat of an expert in the subject of the book reviewed. Be it said to the credit of the better sort of our periodicals and newspapers that their reviews hardly ever fail to give fair satisfaction in this field. When, however, we come to the reviews of what De Quincy calls the literature of power, we have often a different tale For one thing, all literature of power is subjective at least more subjective than objective, and its appeal cannot be the same to everybody. Tastes differ. What the reviewer dislikes the reader may like and what the reviewer relishes the reader may hate. Theoretically speaking, this position must be conceded. But, as a matter of fact, normally, this situation must not and does not arise. If the Reviewer is what Dr. I. A. Richards calls an adequate reader—a man of normal feelings, with no special prepossessions or prejudices, a man of Catholic tastes, widely read, conversant with bad as well as good literature, there is no reason why his judgment should not be ordinarily acceptable to the reader. Whether the reviewer is such a man is what the reader is keen on knowing. And that is why signed reviews are so much in demand. We ask for guidance from a man on whom we can rely. This reliance on great names may not be without its own peculiar risks, but on the whole the system of signed reviews works better than any other.

I have, by implication at least, included judgment as a factor of some importance in a review, and here I am in good company. I'or instance, the Century Dictionary delines a review as 'A critical Examination; a Critique; particularly a written discussion of the merits and defects of a merary work.' I must admit, however, that this definition may not be universally accepted. The shorter Oxford tells us that review is 'a general account or criticism of literary work.' The fact is, of late, all criticism has tended to become impressionist. Anatole France looked upon criticism as 'the adventures of a soul through masterpieces' and Benedetto Croce would have us believe that me critic's sole business is to reproduce the work of art as the author conceived it. To me it appears that this tendency is a reaction against the dogmatic criticism of earner days. The this won t-do-sort of crincism is definitely worse than an attempt to get at the author's point or view. The critic can often ao nothing better than anuate the reader into the inmost recesses of the writer's heart. To reproduce the conditions at the time the work of art was conceived is an achievement of the highest merit, and we should be grateful to a critic who succeds in doing it. But when all his due praise is given to such a critic, we have also the right to ask him whether, while giving his author his due, he has considered the position of the reader or the reader's point of view. How the work of art is concieved is one thing, and how it would affect the reader is quite another thing. Those critics who adventure through masterpieces may not give a moment's thought to the reader, but the reader's point of view is at least as important as the author's, so long as authors write for the readers and not for themselves. And when a critic thinks of giving any importance what-so-ever to the reader's point of view, he has, ipso facto, to include judgment of some sort in his critique.

What is true of criticism on a large scale is true also of reviews—such as appear in periodicals and newspapers. Reviews have to be brief—the briefer the better, provided they have all the essentials of criticism on a large scale—they must recreate the original work of art—that is due from them to the author—and they must understand the reader and make him feel at ease in the presence of the work of art. Judgment of some sort is implicit in this second part of the Reviewer's duty.

PHYSIQUE OF OUR UNIVERSITY WOMEN STUDENTS.

By

DR. (MRS). KRISHNABĀI KHADYE, M.B.BS. Poona.

As a Medical Examiner of the University women students of Poona for the last few years, I have arrived at some conclusions, which I take this opportunity to place before the Public, in this volume which commemorates the services of a great man to the Public of India.

At the outset, I must point out that there is a great improvement in the height and health of our girl students in schools and colleges during the last five years. This is due as much to the greater freedom of life which now has been theirs, as to the Compulsory Physical Training to which they have been subjected in recent times.

Those girls who have at least a moderate kind of freedom in their daily life at home and in the teaching institutions and who take part in sports are the best in health.

Poverty is one of the causes of undernourishment and deficient diet among us and our students are a prey to it. But considering the money that is spent by our students, I must say that the undernourishment and deficiency in diet are due more to our lack of knowledge of balanced diet than to poverty. We must create a real interest in balanced diet among our men and women.

The sight of a good many of our girls is bad owing to uncorrected eyesight. I may say that this is often due to their working when they are not keeping fit, or are convalescent afer some disease like malaria or some infectious fever. We often neglect convalescence and that is often the root cause of many diseases and bad health amongst us. The girl who is deeply engrossed in her studies and does not take any part in the social life of her college is often anaemic or weak. The girl who lives in the college hostel and enjoys a freer life is often better in health than a girl who comes from her home, as I believe the home atmosphere and environments of our girls are not often as free and congenial as they ought to be.

The educated woman is not worse in her married or social life than her uneducated sister, nor does she suffer more in any of the complaints peculiar to women, or in pregnancy, nor does she have more difficult child-labour than her uneducated sister.

It must also be admitted that both our men and women are often ignorant of the rudimentary principles of health—of sex-hygiene, or antenatal and postnatal care, and this is a great handicap in life. Somebody—perhaps the University or the heads of our schools—ought to make the rudimentary knowledge of the rules of hygiene and health—sex-hygiene, balanced diet, first aid, antenatal and postnatal care compulsory for our students—both men and women, if our future generation is to be strong and healthy and hardy enough to take a leading part in our country's social and political life. Without this knowledge, mere culture or deep learning is no good to our boys and girls. For, we ought to know that a sound mind exists only in a sound body.

There are very few facilities for sports and physical exercise for our women students, and many cannot and will not take part in sports, and therefore I think Physical Train-

ing must be made compulsory for all students from the primary education stage to the University stage. I must say here that if Compulsory Physical Training is to be successful, a genuine interest in Physical Training has to be created not only among the students, but also among the parents and the managers of the teaching institutions. Without the co-operation of all these three groups of people, Physical Training tends to become a mere farce. Last but not the least in importance is the medical examination of students. It is medical examination which points out the defects and deficiencies and abnormalities in the student. The guardians and the heads of institutions have to look into these matters.

In conclusion, I would suggest that our teaching institutions ought to take more interest in the physique of our students. They ought to impart to them the knowledge of the rules of hygiene, create a freer and more congenial atmosphere, provide good and adequate—though not necessarily costly—sports facilities and introduce medical examination and Compulsory Physical Training. Only then can we hope to make our young men and women fit to take their due share in the burdens of life.

UNIVERSITY EDUCATION

By

RAJASEVASAKTA DEWAN BAHADUR Dr. S. Krishnaswami Aiyangar, M.A., Honry., Ph.D.

Rajah Sir Annamalai Chettiar, the Founder of the Annamalai University, evinced his practical interest in education when he made his first efforts to found a college in Madura which found fruition ultimately in the starting of what was the Sri Minakshi College in Chidambaram. As is usual with Sir Annamalai Chettiar, it was a whole-hearted effort as he is known not to do things by halves. It is his efforts to make the college many ways a model institution under the Madras University that brought about the acquaintance between us. The college rapidly advanced from step to step, and had almost reached the position of being one of the comparatively few fully equipped colleges in the Presidency, when the agitation for a separate University for the Tamil districts resulted in the appointment of a Tamil University Commission, which was to tour the Tamil districts taking evidence and submit its recommendations in regard to this. The University of Madras was seriously making efforts to become a teaching University contemplated by the Act of 1923. The normal development expected by the sponsors of the new Act was the creation of the teaching University at Madras, which would have become, with its constituent colleges, a teaching centre like Oxford or Cambridge, the affiliated colleges constituting more or less a distinct section of this University, ultimately to become a

separate affiliating University. This course of development was marked out for the Allahabad University and resulted in the creation of the teaching University of Allahabad and the affiliating University of Agra. The Tamil University Committee went about making its enquiries in this view. Differences of opinion soon developed as to the centre of this new University and it became a matter of contention whether Trichinopoly or Madura should have this honour. The majority of the members, however, were opposed to the separation and did not favour it mostly on the ground it would have tended to create a much less efficient affiliating University than the Madras University was during more than sixty years of its existence. In the course of this enquiry and the discussions in connection with it, Sir Annamalai Chettiar's intention to develop the Sri Minakshi College into a unitary teaching institution raised to the rank of a University, was discussed. I took occasion, when the report was got ready, to file a note that the recommendation of the Committee against starting a new University in the Tamil districts should not prejudice the question of the Sri Minakshi College developing into a unitary teaching University. Whether this had any influence or no, the idea fructified in the foundation of the Annamalai University, and took its character readily as a unitary, teaching University. In the course of normal development in earlier years, it held out promise of becoming a University centre of learning very much like the German Universities of the old regime. This position was due entirely to the active exertions all round of Rajah Sir Annamalai Chettiar.

The Annamalai University started under very favourable auspices, thanks to the active interest of this gentleman, and set before itself two specific objects in view. It was to be a residential unitary teaching University.

itself out deliberately Secondly it had laid foster South Indian culture specifically, and work for the special promotion of the study of the history, culture and literature of the Tamils, involving, as it naturally should, the promotion of the study of Tamil and Sanskrit in all their branches to the highest specialised work possible. regard to the active personal taken by the Pro-Chancellor, there was every hope that this double ambition would be realised to the full. Courses were accordingly laid. During the earlier years therefore work went on along the lines laid down and carefully selected appointments were made to fill the various Chairs and, in respect of certain subjects, even provision was made for sending out young men for training in various branches of teaching under terms of indenture to serve the University on their return. These early acts naturally gave the best promise of realising the objects with which the University started. Naturally in the present condition of opinion in regard to University education, there came in the external influences which led on to the expansion of the University along new lines. Certain schemes like schemes of agriculture and industry were brought in, to claim their quota of attention and diversion of funds. We have the fullest appreciation of the development so far in oriental studies and institutions brought into existence therefor, such as the Sanskrit and the Tamil Colleges, the College for Music which promised to develop into a real academy of music, a good library and numbers of up-to-date laboratories. with a residential system and promotion of social life. We feel certain that the distinguished Rajah Saheb who has done so much already to promote this unique institution would find it possible to put the University on the rails for a fuller and a freer and a brighter development, his original

ambition. We congratulate the Rajah Saheb upon his having completed his 60th year, and reaching his Sashti-yabdapurti in orthodox parlance. Let us hope that he will step forward steadily from this milestone to the further Biblical three score and ten, to the more orthodox Satabhisheka or the 80th year, and the real Vedic Satayush or the 101st birthday.

Before concluding, however, we take the liberty of appealing to the Rajah Saheb to exert his influence, both among the wealthy members of his community and others similarly happily placed, to secure if necessary their co-operation and good offices to place this University It is his function as the original beyond all need. founder the institution to hold aloft the high Promotion of the culture characteristic India involves an equal and impartial treatment of all subjects coming within the purview of Indian studies. Linguistic studies of the most general character imply, as it does in distant foreign countries, the study of Sanskrit language and literature essentially as a basic study, and the understanding of the Indian culture as such, or of its preservation and promotion on right lines, equally demand the cultivation of its philosophy, history and the sciences of India. In the realm of Sanskrit studies, South Indian Sanskrit studies have a very important and peculiar role to play in the study of Indian literature and culture. May the Almighty God help him to fulfil his aims, and place his own foundation on a permanent footing to achieve his high cultural ambition. May the Almighty God shower on Him His blessings to enable him to do this good work.

EVOLUTION OF STARS

By

B. S. MADHAVA RAO, D.Sc., F.R.A.S.

Professor of Applied Mathematics, University of Mysore.

Introduction

The first notable success of astrophysics was the theory of ionisation of stellar atmospheres. Later work related to constitution of stars dealing with problems of equilibrium and energy transport leading to the mass-luminosity relation, which can be taken to characterise the second stage of this development. As long as considerations relating to energy-production were not tackled rigorously, there was no hope of proceeding further and reaching the third stage of explaining the mysteries of the Russell-Hertzsprung diagram. The development of nuclear physics in the last few years has made it possible to obtain definite results regarding energy—generation. Just as in the first stage it was the theory of atomic structure that helped in the development, it is appropriate that in this third stage we should invoke the help of nuclear structure. Some of the achievements of these latest ideas, their bearing on stellar evolution and the difficulties still to be surmounted are indicated in this article.

It is a great pleasure to offer this as my humble contribution to the volume commemorating the 61st birthday of one whose ideals in founding this University have been as lofty and sublime in conception as the subject of this article.

I. Internal constitution of stars

A general theory of the internal constitution of stars has been shown to be possible on the basis of the laws of gravitation, of radiation, of atomic structure and of simple gas laws. The theory is not too complicated mainly on account of the fact that the properties of matter in its gaseous and highly ionised state in the interior due to the enormous pressures and temperatures ruling there are much simpler than in any other state.

The principle of mechanical equilibrium permits the calculation of the pressure P at any point of a star if one knows the way in which the density ϱ varies with the distance from the centre in other words if the "model" be known.

In the simple gaseous ionisated state the mean molecular weight μ can be calculated from atomic theory, and the equation of state for the perfect gas is also valid. For a given model therefore the temperature T at any point can also be calculated.

The next important consideration is that at the high temperatures in the interior, radiation pressure is as important as gas pressure. Taking this into account and using the fact that radiation pressure varies as the fourth power of the temperature, one could calculate the internal temperature of a star for any given model. The calculations become particularly simple on Eddington's model for which $\varrho_e=28$ that of water,

 $P_c=36\times10^9$ atm; $T_c=2.9\times10^7$ K for the sun.

To relate the above quantities with conditions at the surface, one has next got to calculate the escape of radiation from the interior. On general principles it is evident that the heat will flow, inside the star, from regions where the radiation pressure is greater to those where it is smaller. This flow of heat however meets with a resistance due to the opacity of the gas, and the co-efficient of opacity & can be calculated as a function of P, µ and T by applying the general methods of the quantum theory of the interaction of matter and radiation. It is thus possible, starting with pure theory, to calculate the luminosity of a star of given mass and radius and built on a given model. It is found that the luminosity increases very rapidly with the star's mass-rather faster than its fourth power on the average. For the same mass it changes but slowly with the star's size (inversely as \sqrt{r}). Differences in the model make surprisingly little difference in the luminosity. The chemical composition makes little difference too except for the abundance of hydrogen, the luminosity of a star of almost pure hydrogen being less by a factor of 300. Applying this to the sun, an agreement between calculated and observed luminosities is obtained if hydrogen forms 35% by weight of the interior mass, the rest being heavy elements.

This conclusion that the luminosity of a star depends mainly upon its mass is in effect Eddington's well known "mass-luminosity relation," and it will be shown later that it is really a consequence of the fact that the hydrogen content of a star does not vary at random for a given mass.

2. The Russell-Hertzsprung diagram.

The theory of constitution of stars described above accounts for the close correlation between luminosities and masses, but it gives no explanation at all of the equally conspicuous relations connecting luminosity and spectral class as is brought out clearly in the Russell—Hertzsprung diagram, R.H.D. in brief. Experience has shown that, up to a certain approximation, all stars are characterised by two numbers which might be chosen in general as the luminosity L and the surface temperature T. These at the same time also define the radius of the star R. In the R.H.D. these co-ordinates are plotted as log L and log T; alternatively one could also plot log (R/R) and log (L/L) and call

this the modified R.H.D. or the R-L plane. The diagram shows (Fig. I) that stars favour only certain regions of the plane. The great majority of the stars belong to the so

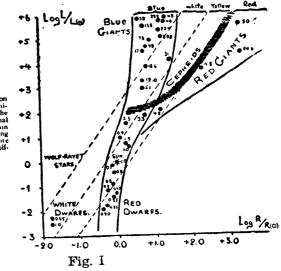


Fig. 1. Showing the relation between masses, radii and luminosities of various stars and the division of stars into the normal stars or the stars of the man sequence, red gaints (including Cepheid variables) and white dwarfs (including probably Wolf-Rayer-Stars)

called main-sequence; their luminosities and radii increase rather regularly with their mass, as also the effective temperature. So the stars of this group range from hot and luminous blue giants down to the cool and faint red dwarfs. According to the best observations it is practically a sharp line, and the stars belonging to it therefore form a one-parameter group. Besides the stars of the main sequence,

and to the right of them above lie the red giants (L large T small) with L and R larger than for stars of the same mass in the main sequence. In the R-L diagram these form a separate branch (giant branch) branching off near the middle of the main sequence. It should also be noted that some particular stars located in this region possess a property of periodic luminosity changes (Cepheid variaables and others of long period) and represent the upper boundary, in respect of L, of the giant branch. Again to the left and below the main sequence are the white dwarf states (T large, L small) corresponding to smaller luminosities and radii than stars of corresponding masses in the main sequence. Probably related to the white dwarfs are the central stars of planetary nebulae (Wolf-Rayet stars) which also possess small radii for given luminosities.

A proper understanding of this distribution of stars in the R-L diagram is of fundamental importance for questions of stellar evolution and it can be seen from very general considerations that this understanding depends on a knowledge of the mechanism of energy production in stars. In consonance with the theorem of Vogt and Russell one must expect theoretically that under certain assumptions the state of a star is completely characterised by two parameters and accordingly by its position in the R.H.D. Further the matter which a star consists of is determined by specifying its total mass and its chemical composition. If now the original chemical composition of stellar material be universally the same (and our knowledge of the abundance relations of chemical elements makes this assumption plausible) a difference in the chemical composition of stars can only be a result of the energy-generating nuclear reactions which on their part are determined by the state of the

star. Therefore there remain, besides, only the mass and the age of the star as independent parameters.

The calculation of the empirical parameters L and T from the mass and the parameter of chemical composition assumes a theory of the internal constitution of the star. On the theory of Eddington sketched in § 1 which assumes the conditions of equilibrium and energy-transport as fundamental but not the energy-generation, the mass-luminosity relation is obtained as a relation between two parameters, the stars of different luminosities in the main sequence being also stars of different masses. But it is obvious however that the mass-luminosity relation merely describes their uniform chemical composition. The principal problem of the theory of nuclear reactions in stars is to derive the dependence of energy-generation on chemical composition, and thereby elucidate the structure of the R.H.D.

3. Stellar nuclear reactions

The magnitude of the problem of energy-generation inside a star can be best illustrated by considering the Sun, a typical star. The Sun radiates 2 ergs per second per gram of its mass which corresponds to a loss of 4,200,000 metric tons per second, and since there is equilibrium between generation and loss of energy, energy of the same order must have continued to be generated throughout geological times during the last $2 \cdot 10^9$ years. Besides the Sun there are stars which throw out nearly thousand times as much energy. The question naturally arises: where does this energy come from? According to the ideas of modern Physics, there are four possible sources:

(i) Contraction of a star without change of chemical constitution—the energy liberated is gravitational energy.

- (ii) The building up of heavy atomic nucleii out of lighter ones—the energy liberated is nuclear energy.
- (iii) Contraction by transformation of a part of the matter into densely packed neutrons.
- (iv) Complete annihilation of matter—energy liberated is the rest energy of matter.

Of these the last source can be left out of account in view of the fact that it has not been so far observed in the laboratory, and even from a theoretical point of view the discovery of the neutron and positron has shown that by the equalisation of positive and negative charges only the electron mass is transformed into radiation while the proton mass is unaltered. On very general thermodynamic arguments it can be shown that the third source postulated is improbable for normal stars but might be invoked for explaining catastrophic phenomena. Thus we have to make the assumption that during the life time of a star, in so far as it is subject to our observation, only the first two sources need be considered. Of these the first alone is not sufficient to explain the production of energy as for example, in the case of the Sun whose present rate of radiation would exhaust this source in 4.107 years. One is led almost by a process of exhaustion to the second as the most likely one. Although this had been surmised some years ago it is only the progress of nuclear physics in the last few years that has made it possible to prove this surmise and decide rather definitely which process can and which cannot occur in the interior of stars. A careful analysis by Bethe of all the possible processes has shown that the only thermonuclear reactions which can occur at sufficiently large rates at the temperatures of stellar interiors are those between protons and the light nucleii. In general terms one might say that the energy production of stars is due entirely to the combination of four protons and two electrons into an α particle. As can be seen from Table I this formation of four atoms of hydrogens into one of helium results in a diamution of the combined masses of the interacting nucleii by 1 part in 135. This simplifies the discussion of stellar evolution in as much as the amount of heavy matter, and therefore the opacity, does not change with the time.

TABLE Corrected and additional nuclear masses, and binding energies.

Nucleus	Mass	BINDING ENERGY (MMU)	Reference
n¹	1.008 93		19
He ³	3.016 99	5.87	18
H4	4.025 4	0.6 ± 1	
He⁴	4.003 86		29
Li*	4.026 9	-1 ± 1	
He ⁵	5.013 7	-0.9 ± 0.2	23
Liš	5.013 6	-1.6 ± 0.3	
Be ⁶	6.021 9	-1.8 ± 0.8	21
Be ⁷	7.019 28	5.7	26
Be ⁸	8.007 80	-0.08 ± 0.04	28
B8	8.027 4	0.0 ± 0.4	21
B ₉	9.016 4	-0.5 ± 0.2	21
C^{10}	10.020 2	3.8	21
N 12	12.022 5 -24 3	0.0 ± 0.9	21
N 13	13.010 08	2.03	19
O14	14.013 1	5.1	21

Table I

These reactions of hydrogen with the lighter nucleii are shown in Table II which gives the energy evolution Q of the reaction, its probability per second and also the life time, all calculated for a temperature of 2×10^7 degrees.

As has been shown by Bethe no elements heavier than helium can be built up to any appreciable extent permanently in the interior of stars under present conditions. An extract from table II of reactions leading to He⁴ is given in Table III, along with the average energy produced in ergs/gm

TABLE	Probability of	nuclear	reaction's at	2-10	degrees	••
-------	----------------	---------	---------------	------	---------	----

$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	REACTION	Q (MMU)	P (F1)		P (MC '')	LIPE, FOR #x: = 10
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	H+H+H'++	1 5,3	Ref 10			1.2 104 yr
H+H+H=He* 213	647 + 11 = 11e2	5.9	1 E			2 sec
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	H'+H = He'	21.3				0.2 sec.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Her + H = I i'					l day
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	He++11=1+1*					6 days
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	14+11=11e+11c>	4.1				5 sec
Section Sect	L1'+H = 2 He'					1 min
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	He"+H = B"	(0.5)				2000 yr
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	He++11 = 11+11c*	2.4		38 t		15 տուս.
Bit + H = C 9 2 10 D 44 6 10 - 11 1000	R*+H=(100	3,5		44 6	2 10-13	5000 yr
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		9 2	10 D	446		1000 yr
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	R"+H=3 He	94	104 E	44 6	£.2 10-7	3 days
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		(0.4)	0 02 D		10-17	10° 3 r.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Cu+H=ND	20	0.6 X	50.6	4 10-16	2 5 10° yr
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	C"+H=N"	8.2	30 X	50.6	2.10-10	5 · 10 · yr
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	N#+H=0*	7.8	5 D	56.3	2 10-17	5 10° yr
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	N#+H=(17+He*	5.2	10 E	56.3	5 - 10 -11	2000 yr
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$					8 10-22	10 ¹² yr
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	1773 H = O4 1 Hc	8.8	10* E			3 10 ⁷ yr.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$						2-10th yr.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						10/7 yr.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						3 10° yr
H!+H!+lle+H						2 · (0= yr.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						e-10- 31.
Be ¹ +H ¹ -B ¹ +a ⁺						
Bet-Here (**) 16.2 1.0°* 80.5 3-10°* Het-Here 1: 1.7 4-10°*Q 27.5 3-10°* Het-Here Be' 1.6 0.0′*D' 47.3 3-10°* Het-Here Be' (0.05) 5-10°*Q' 50.0 10°* Lighther Be' 9.1 1.0° 27.0° 3.0° 20°*A 3.0°*A 3.0°*A 3.0°*A 3.0°*A						
Hr + He = L + 1						
Her∔Her=Be? 16 007.D° 473 3.10 → 3 t Her∔Her=Be* (005) 5.10 → 500 10 → Li²+Her=B° 91 1.D' 710 \$5.10 →						
Het + Het = Be ¹ (0.05) 5 ² (0 ⁻¹ Q 50.0 10 ⁻²⁰ Li ² + Het = B ¹⁰ 91 1D' 21.0 25·10 ⁻²⁰						J 10° yr.
Li]+Het=Ri) 91 1D 25-10-56						a to yr.
C"+He'=O' 78 1Q' 119 7-10-0						8 tO° yr.

The letters in the column giving the level width mean. X experimental value, D evalculated for dipole radiation, from Eq. (11), D evaluation with small specific charge 1/4 to 1/30 of Eq. (12), O equadrispole radiation and (12a), and E estimate and the results are the results in unstable. They are there are the reported or over the rescalants in unstable. They are the merchy for the sake of discussions.

Table II

per second. As can be seen at once from this table it is the nitrogen reaction alone which gives energy generation in consonance with the observed data for the sun. We can divide these reactions into three classes:

(i) $H+H=D+\epsilon+$

with the deuteron being next transferred into He⁴ by further capture of protons. From the life time value in Table II and energy generation value in Table III, this appears a probable reaction, but there is a possibility that this reaction itself may be forbidden by selection rules.

REACTION	Average Energy Production $\epsilon(erg/g sec.)$
$H^1 + H^1 = H^2 + \epsilon^+ + f.*$	0.2
$H^2+H^1=He^8$	3×10^{16}
$Li^7 + H^1 = 2He^4$	4×10 ¹⁴
$B^{10} + H^1 = C^{11} + f$	3×10 ^a
$B^{11} + H^{1} = 3He^{4}$	1010
$N^{14} + H^1 = O^{16} + f$	3
$O^{10} + H^1 = F^{17} + f$	10-4

TABLE Energy production in the sun for several nuclear reactions.

Table III

(ii) the reactions in which the light elements Li, Be, B are involved

$$Li^7 + H^1 = 2 He^4$$

 $Be^9 + H^1 = Li^6 + He^4$
 $B^{11} + H^1 = 3 He^4$

Li begins to be used up at about 2×10^6 deg, Be at 3.5×10^6 deg and the isotopes of B at about 9×10^6 degrees. As seen from Table II these light elements would "burn" in a very short time, and moreover they are destroyed permanently and will not be replaced. Thus for example, Be would act in the following way

$$Be^{9} + H^{1} = Li^{6} + He^{4}$$

 $Li^{6} + H^{1} = Be^{7}$
 $Be^{7} + E^{-} = Li^{7}$
 $Li^{7} + H^{1} = 2 He^{4}$

(iii)
$$N^{14} H^1 = 0^{15}$$

which written out fully as a chain reaction is given in Table IV. This is in fact the most important source of stellar

^{*&}quot;+f." means that the energy production in the reactions following the one listed, is included. E.g. the figure for the $N^{14}+H^1$ includes the complete chain (1).

$$C^{12}+H^{1}=N^{13}$$
,
 $N^{13}=C^{13}+\epsilon^{+}$,
 $C^{13}+H^{1}=N^{14}$,
 $N^{14}+H^{1}=O^{15}$,
 $O^{15}=N^{15}+\epsilon^{+}$,
 $N^{15}+H^{1}=C^{12}+He^{4}$.

energy and in it carbon and nitrogen isotopes serve merely as catalysts for the combination. It can conveniently be called the carbon-nitrogen cycle. As seen from Table II, a given C^{12} nucleus will, at the centre of the sun, capture a proton once in $2\cdot 5\times 10^6$ years, a given N^{14} once in 5×10^7 years. These times are short compared with the age of the sun, and therefore the cycle will have repeated itself many times in the history of the sun so that statistical equilibrium has been established between all the nucleii occuring in the cycle. Another important point about this cycle is its very strong dependence on temperature viz. T^{18} and this has important astrophysical consequences.

The one thing that is common to all the above reactions is the end product He^4 , the α -particle. Obviously nothing can happen to it since the reaction $He^4 + H = Li^5$ is unstable because of the non-existence of Li^5 . The

α-particle appears to be the only thing stable in this microcosm of changes, and if hydrogen be the "fuel of the stars" helium is the ashes.

4. The Sun

As has already been remarked in connection with Table II it is the carbon-nitrogen cycle that keeps the sun shining. This can be brought out in a more striking way by answering the following question. Neglecting all nuclear considerations regarding the cycle, which nucleus will give us the right energy evolution in the sun? or conversely; given an energy evolution of 20 ergs/g-sec at the centre, and 2 ergs/g.sec at the surface, which nuclear reaction will give us the right central temperature (~19×10⁶ degrees)?

TABLE Central temperatures necessary for giving observed energy production in sun, with various nuclear reactions.

REACTION	T (million degrees)
$H^2 + H = He^3$	0.36
$He^4+H=Li^5$	2.1
$Li^7 + H = 2He^4$	2.2
$Be^9 + H = Li^6 + Hc^4$	3.3
$B^{10} + H = C^{11}$	9.2
$B^{11}+H=3He^4$	5.5
$C^{12} + H = N^{13}$	15.5
$N^{14} + H = O^{15}$	18.3
$O^{16} + H = F^{17}$	32
$Ne^{22} + H = Na^{23}$	37

Table V

This calculation has been carried out in Table V. It has been assumed that the density is 80, the hydrogen-concentration 35% that of the other reactant 10% by weight. It is seen from the table that all nucleii up to boron require extremely low temperatures in order not to give too much energy-production; these temperatures ($<10^7$ degrees) are quite irreconcilable with the equations of hydrostatic and radiation equilibrium. On the other hand, oxygen and neon would require much too high temperatures. Only carbon and nitrogen require nearly, and nitrogen in fact exactly, the central temperature obtained from the Eddington integrations (19×10^6 degrees). Thus from stellar data alone we could have predicted that the carbon-nitrogen cycle is the process responsible for the energy production.

TABLE Comparison of the carbon-nitrogen reaction with observations.

Star			// CONTENT (PER- CENT)	CENTRAL TEM- PERATURE (MILLION DEGREES)	
	Luminosity ERG/G SEC.			INTE- GRATION	ENERGY PRODUC- TION
Sun	2.0	76	35	19	18.5
Sirius A	30	41	35	26	22
Capella	50	0.16	35	6	32
U Öphiuchi (bright)	180	12	50	25	26
Y Cygni (bright)	1200	6.5	80	32	30

Table VI

5. The main sequence

The theory that the main sequence stars owe their energy generation chiefly to the carbon-nitrogen reaction is very satisfactorily verified from observational data. In table VI a comparison of the theory with observation is

made in the case of five stars for which the data are sufficiently well-known. The last column in the table is calculated as the necessary central temperature to give the correct energy evolution as observed. In the calculations the N¹⁴ content is taken as 10′/o. The last column but one gives the temperatures as calculated on £ddington's theory. The agreement between the two columns is highly satisfactory, the only exception being the star Capella which cannot really be considered as belonging to the main sequence.

Russell had suggested long ago that the central temperatures of all stars of the main sequence are nearly the same although the luminosities of these stars varied by factors of the order 10^6 . This is easily understood on the present theory if we assume that in general all these stars have the same energy source. In fact the very strong dependence of the N-C cycle on temperature ($\sim T^{18}$) shows that a small variation of the central temperature brings about a large change in the luminosity.

As pointed out by Von Weiszsäcker it is also possible on this theory to understand the bend in the R·H·D (See Fig. 1) in the region of the red dwarfs. The reaction $H+H=D+\epsilon+$ already considered before plays a role in this connection. Due to its weak dependence on temperature this reaction is not of much importance for the major part of stars in the main sequence whose central temperature are $\geq 2\times 10^7$ degrees. In the region of smaller temperatures of the order 15×10^6 degrees and less, this reaction appears to be concurrent with the N-C reaction and as shown by Fig. 2. even of greater importance. The bend in the main sequence is to be attributed to the weak dependence of luminosity on central temperature in this region of red dwarfs of mass $(\frac{1}{10})M$ nearly.

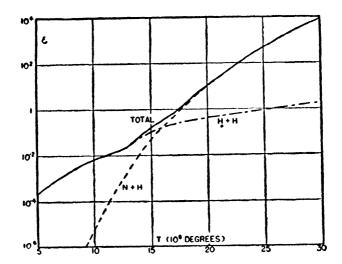


Fig. The energy production in ergs/g sec. due to the proton-proton combination (curve H+H) and the carbon-nitrogen cycle (N+H), as a function of the central temperature of the star. Solid curve: total energy production caused by both reactions. The following assumptions were made: central density = 100, hydrogen concentration 35 percent, nitrogen 10 percent; average energy production 1/5 of central production for H+H, 1/10 for N+H.

Fig. II

The narrow width of the main sequence can be understood if we observe that its stars are prescribed to lie in a region which corresponds to certain allowed variations in their chemical composition. These stars must satisfy both the following conditions (a) they must not be so young that their energy-generation is due either to contraction or the burning of elements lighter than carbon and (b) on the other hand they must not fail to possess hydrogen. We describe gaints as those stars which do not satisfy (a) and the white dwarfs as those which do not satisfy (b).

6. Giants and Variable Stars.

The central temperatures of these stars are less by a factor 10 than those of main sequence stars, which also

amounts to low densities. Under these circumstances it is impossible for the carbon cycle to work, and one has to assume that the energy is generated either by contraction or by the transformation of very light atoms. In either case the giants must still be young stars. Since the elements Li, Be and B are scarce on the sun and the earth it is plausible to assume that these elements have been burnt away in normal stars but exist in abundance in very young stars.:

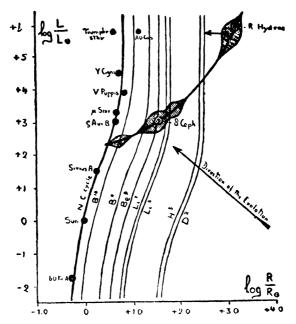


Fig. Pulsating variables and different nuclear reactions.

Fig. III

T Mar

On the assumption that the energy generation in giants is due to reactions of the lighter elements, Gamow and Teller have drawn in the R-L diagram calculated curves for each reaction parallel to the main sequence (See Fig. 3). A star which contains all these nucleii in large quantities would

stay along one of these curve as long as the corresponding isotope was completely burnt out, and then make a transition to the curve of next higher temperature and finally land in the main sequence. On this picture such a star should spend a comparatively long time within each of these bands and undergo a more rapid gravitational contraction during the transition from one such region to another. As is well known these variable stars from a oneparameter sequence, all their characteristics being dependent on the vibration period. Thus the knowledge of this period fixes the position of the star on the R-L diagram. In fig 3. the region of pulsating stars in shown by the shaded area, the width of each area being proportional to the number of stars observed. It is seen that there are definite concentrations of the stars near the regions where the reactions of light elements become ant. The three regions corresponding to cluster, Cepheid and long-period variables might be associated with the B^{10} and Li, Be, and perhaps the D-reactions respectively. Gamow goes even further in explaining the line of the pulsating stars as a limit to the distribution of red-giants in the R-L diagram. According to him this line is to be interpreted as the limit above which the evolution is purely gravitational (until the star gets into the main sequence) and below which it is due to nuclear reactions. Because of the short time scale of gravitational contraction the number of stars observed above this line must be statistically small, and this explains the gap between this line and the main sequence. The pulsative instability of the stars near this limiting line can be explained as due to the conditions existing during the transition from the state of thermonuclear evolution into the state of purely gravitational contraction.

This theory, charming as it is, meets with the difficulty that the abundance of the lighter elements in red giants does not appear to be sufficient to retard the process of contraction suitably, and it may be still necessary to assume that either pure contraction and some other unknown source of energy plays a part in the evolution of giants.

7. White dwarfs and Novae

In connection with the Vogt-Russell theorem it has already been remarked that the mass and a parameter denoting chemical composition can be chosen as independent numbers characterising a star. For stars in the region to the left of the main sequence we can take the hydrogen content as the parameter of this chemical composition in so far as nuclear reactions are concerned. From the theory of nuclear reactions it follows at once that a star to the left of the main sequence can contain little or no hydrogen, for if it did the state of high temperature and density would, inspite of gravitation, induce sufficient energy generation to prevent contraction.

Before understanding the evolutionary significance of white dwarfs it is necessary to get some theoretical ideas about them which, thanks to the work of Chandrasekhar, are very satisfactory. They represent senility, almost the approach to the final state of a contracting star in which all the energy, gravitational, nuclear or what not, has been exhausted and radiated away into space, and nothing more can happen to it. Within them the electrons are degenerate jammed together as closely as the quantum laws permit. It has been shown that the radius and density of a star in this state are determined by its mass (and H-content if any). If the mass of a star does not exceed the value $M_0 = 5.7M$ / μ^2

($\mu=$ molecular weight and equal to 2 for no hydrogen) i.e. $1\cdot 4$ M , the final state by contraction will be a sphere of completely degenerate (partially relativistic) electron gas. For such masses less than M , each mass gives a definite

value R_{min} for the final radius the least value 0 or R_{min} corresponding to M_0 itself. For masses larger than M_0 the critical conditions will not be reached, and as far as present knowledge goes such a star might contract indefinitely. Another interesting point in connection with stars of mass \geq M_0 might also be noticed. For the mass lying between $5.7~M_\odot/\mu^2$ and $6.6~M_\odot/\mu^2$, the degeneracy of an electron

gas will always begin at a certain stage while for still heavier stars the electrons will always remain in the state of an ideal gas. The evolutionary significance of these ideas will be discussed in the last section.

As intermediate states between the main sequence and white dwarfs are the novae, according to ideas put forth by Biermann. This theory is based on the following facts:

- (i) For a normal nova outburst the energy generated is small as compared with the thermal energy content of the stars.
- (ii) The luminosity of a nova before and after the outburst is the same within the limit of errors of observation.
- (iii) As far as the best observations go, the final state after an outburst is intermediate between the main-sequence and white dwarf states. The first two observations which are mutually compatible show that the outburst does not materially alter the inner structure

of the star, and this shows that, in view of (iii) the star was also in the intermediate state before the outburst.

The origin of the outburst itself has been ascribed by Vogt to the fact that the onset of degeneracy would automatically liberate the great quantity of radiant energy previously trapped in the gas, since degenerate gas has very small opacity.

8. Evolution of Stars

If we accept the evolutionary hypothesis and postulate the energy sources as in section, 3 it follows that small and large masses should have a rather different evolutionary history, since the mass or a star during its whole life history is almost invariant changing by less than 1 per cent.

Consider first a star of small mass. This would start from the main sequence, and for its further evolution the H-content might be taken as the parameter. The energygeneration would be due to the N-C cycle and the luminosity would increase by nearly a factor of 100 as the H-content is decreasing. The existence of the empirical massluminosity relation can be interpreted as a statistical correlation intrinsically due to the fact that the star spends most of its life time in the low luminosity part of its evolutionary track. This track based on the N-H reaction is shown schematically in Fig. 4 for the sun. After the hydrogen content has fallen below a certain limit the star will start a contraction which steadily increases in speed. When the Hcontents falls to nearly 0.002 per cent the nuclear energy liberation becomes negligible as compared with the gravitational. The evolutionary track due to contraction, is shown further in the same figure, and gives rise to a continuous increase in luminosity during a comparatively long period of

time. The last stage of contraction will now essentially depend on the mass. For masses < 1 $^{\cdot}4$ M $_{\odot}$ the contractive

evolution begins to deviate because of the beginning of the formation of a degenerate electron gas in the central region. The rate of contraction will considerably slow down, and the star reaches the white dwarf stage where it acquires a long lease of life. Going still further in evolution

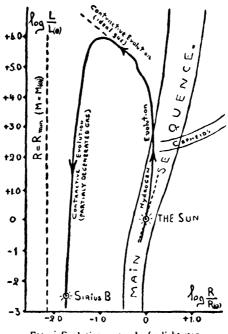


Fig. 'Evolutionary track of a light star.
Fig. IV

after the white dwarf stage, the increasing exhaustion would result in the outer non-degenerate layers becoming thinner, and the star would shrink and grow fainter and cooler becoming "a yellow dwarf" and ending as a "black dwarf." For stars with masses larger than 1.4 M (but small) the

process of gravitational contraction is not limited by any

maximum density and such stars are apparently destined to unlimited contraction with central density and temperature rising above any given value. Fig. 4 also shows, according to Gamow, that white dwarfs are at present far from the finite stage of contraction, as the difference between the actual track for a star of mass M and the dotted track

R=R_{min} indicates. Another very interesting suggestion made by Gamow is that stars of mass between $5.7M_{\odot}/\mu^2$ and $6.6~M_{\odot}/\mu^2$ can explain, while they are getting into a degenerate state, the formation of "super-novae" by the process of neutron-formation.

We now come to consider the evolution of large masses.

The first stage of evolution for these viz., the red giant state, and the transition through the pulsating state to the region of blue giants in the main sequence appear fairly simple to understand. The second stage as to what to happens to these when they go over to the left of the main sequence does not appear to be quite clear at present. If one postulated that they met the same fate as stars of masses greater than the Chandrasekhar-Landau limit of 1.4 M viz. contraction to arbitrarily large densities, we ought to find dense states of large masses; but these have never been observed. Two ways, perhaps not mutually exclusive, have been suggested to meet this difficulty Gamow has pointed out that such contraction cannot take place indefinitely because, on account of the angular momentum of the stars, the centrifugal forces soon become large and cause the breaking of such a massive star into several small pieces (see Fig. 5) with the masses below the critical value. These pieces will

then continue to exist indefinitely in the form of white

dwarfs. Such an explanation would amount to the drastic assumption that existing white dwarfs do not represent a finite stage of evolution of a single star but are fragments of the explosion of heavy stars. The other way is based on the suggestion of Chandrasekhar that all stars of large mass when they come near the region of white dwarfs actually cast off their masses on account of excessive radia-

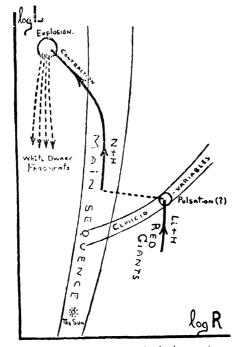


Fig Evolutionary track of a heavy star

Fig. V

tion pressure, as is observed in the Wolf-Rayet stars. After casting off their mass, these stars would reach the white dwarf stage. This suggestion like that of Gamow also makes the white dwarf stage not a finite one but the result of a catastrophic change.

While the results based on the carbon cycle energy-generation can be considered quite satisfactory for the main-sequence stars, the above considerations relating to giants and white dwarfs are not quite satisfactory and there appear some contradictions which will now be pointed out. The first difficulty is presented by the existence of stars of very high luminosity like the blue giant γ -Cygni near the top of the main sequence (M=17) and the red super giant) ζ -

Aurigae. These giants radiate as much as 1000 erg/g. sec. or more, and at this rate the preponderant initial hydrogen content would be completely consumed in 10^8 or even 10^7 years (i.e. in a time much shorter than even the age 109 years usually given to the stars). The simplest explanation of this would perhaps be that these are comparative young stars formed long after the separation of the galaxies (on the expanding Universe hypothesis). In view of the fact that even at the present time the mass of interstellar matter is commensurate with that of the stars, there is perhaps intrinsically nothing against such an assumption. But it has to face the difficulty that in star-clusters to which a common origin is to be ascribed there exist together giants and faint main-sequonce stars which cannot certainly be equally old. Moreover why should only stars of great mass be younger than the galaxy, and why should there not be stars to the right of the main sequence having low luminosity and going over into stars of the solar type or fainter types? The second difficulty relates to the white dwarfs. Such a star having the mass of the sun, and negligible hydrogen content would require for its formation, through the process of normal avalution at least 1011 years i.e. periods longer than the age of the galaxies. The suggestion of Gamow that white dwarfs known at present do not represent the finite stages of normal evolution of smaller masses but fragments of larger stars broken into pieces would no doubt remove this difficulty, but it would be hard to assume this unless it can be shown independently that the present white dwarfs are not the result of the normal evolution of a star of mass < 1.4 M starting from the main sequence. Another way

of escape out of the difficulty suggested by DeSitter is to assume that the white dwarfs are really older than the galaxies, and being dense "hard nuts to crack" they actually came through the period when the galaxies were all together and had not begun to separate. This again appears difficult to understand if the idea were applied to Sirius A and Sirius B, components of a double star and the latter a white dwarf.

In conclusion we might say that while we know why the main sequence stars are there shining, we do not know why the giant stars still shine, and why the white dwarfs are already there.

REFERENCES

- 1. Russell-Dugan-Stewart—Astronomy II—Chaps. 15, 16 and Supplement.
- 2. C. F. von Weiszsacker—Astronomische Hinweis auf die Eigenschaften der Elementarteilchen (report for the 8th Solvay Congress).
- 3. H. A. Bethe-Phys. Rev., 55 (1939) p. 434.
- 4. G. Gamow—ibid., 55, 1939, p. 718.
- 5. Gamow & Teller-ibid., p. 791, p. 796.
- 6. H. N. Russell—9th James Arthur Lecture, Science, 92, 1940, p. 19.

THE SOLILOQUY

By

C. R. Myleru, M.A.

Modern dramatic criticism, and also the practice of present-day playwrights are definitely against the use of soliloquies in dramas. They are condemned as old-fashioned, childish and conventional. The soliloquy might have come in handy for Shakespeare to reveal the workings of the mind of the villain Iago, and also incidentally to indulge in his poetic outbursts, but, is it natural, asks the twentieth century dramatist. Do people soliloquise when they go shopping or run to catch trains or even when they get married? On these grounds all soliloquies have been completely banished from modern plays, and especially the realistic ones dealing with every-day life. If an unwary playwright should introduce one or two of these unfortunate soliloquies, he is immediately branded as out-of-date, and medieval.

But before we examine the question in detail let us see what is a soliloquy. It is the speech in which a character speaks aloud without, or regardless, of the presence of hearers, directly, to the audience. Very often in Elizabethan plays we will have the villain for example laying aside his mask and baring his soul to the audience in a speech delivered to them in confidence. We can also include under this head the 'asides,' which are common in old plays. These were the means employed by dramatists to take us down into the hidden recesses of a person's nature, and to reveal the motives of conduct which could not be disclosed in the course of ordinary dialogue. Such knowledge would be necessary

for the spectators to understand the characters and their actions completely. The dramatist is at a disadvantage when compared to the novelist; the latter can dissect his characters and reveal their inmost thoughts, but the dramatist can have no chance of doing it. That is why the old playwrights had recourse to soliloquies. (It is curious how even when there is no necessity, some modern novelists, make use of soliloquies in their novels!) While the characters are thinking aloud, we are permitted to over-hear what they say. It should not be taken that they are addressing their remarks directly to the audience, though some actors might recite their soliloquies in that style.

The soliloguy played an important part in ancient Greek Drama. In Aeschylus we have the bound Prometheus proclaiming his woes to the heavens, before the daughters of Ocean come to comfort him. Even in Sophocles and Euripides there are several long speeches which are spoken at large in the manner of soliloquies; they are not directly addressed to the chorus. But even when speeches are addressed to the chorus, they are in the nature of confessions of the inmost thoughts of the chief characters. In French Drama also the same system is followed; the chorus has shrunk to a single attendant for each of the chief characters, who always accompanies his hero or heorine, and hears all that is said by the chief figures. Thus the clever French dramatists, while avoiding all semblance of the soliloguy, profited by all its advantages. These confidants were colourless creatures, drawn vaguely and existed for the sole purpose of being talked to. Victor Hugo dismissed these pale figures from his plays; he was therefore driven back to the soliloquy. The argumentative monologue of the king in "Hernani" is one of the longest soliloquies in all dramatic literature. It is full of Hugo's swelling rhetoric

and soaring figures of speech. Shakespeare and Moliere, born-playwrights that they were, knew instinctively how valuable the soliloguy could be to them. They never worried about the naturalness or otherwise of the convention. Whatever was acceptable to their audiences, they made use of without any hesitation. In Shakespeare we find his chief characters again and again revealing their intimate thoughts and desires through their soliloquies. Almost always these are helpful in making us understand clearly the workings of the mind of his more complex characters. If these soliloquies were not there, we may not be able to follow some of the actions of some of his more intricate creations. But for these self-revealing passages we may not be able to understand the character of some of his men and women. Shakespeare makes use of the soliloguy most in his "Othello." He uses it again and again to let Iago reveal his own villainy, as if he did not want the groundlings to have any doubts about the wickedness of his honest Iago!

But neither Shakespeare nor Moliere distinguished between the proper use and abuse of soliloquy. There is soliloquy which reveals character, and that which informs us about the further development of the plot. The former is certainly on a higher plane, which is absolutely necessary when depicting deep conflict of emotions or psychological conditions. "It lets a tortured hero unpack his heart; it provides a window to his soul; it gives the spectator a pleasure not to be had otherwise." Professor Bradley remarks in his "Shakespearean Tragedy" "in listening to a soliloquy we ought never to feel that we are being addressed; in this respect, as in others, many of Shakespeare's soliloquies are masterpieces; in some the purpose of giving information lies bare, and in one or two the actor openly speaks to the audience." Moliere was as bad Shakespeare in this res-

pect. They did not even make sure that there was no one else present on the stage, when some characters were soliloquizing: Romeo overhears Juliet's soliloquy from the balcony; in Moliere's "Miser" also there are such situations!

The soliloguy has been defended ably by many writers. William Congreve in his Epistle Dedicatory to the "Double Dealer" puts up a stout fight in favour of soliloquies. "I grant that for a man to talk to himself appears absurd and unnatural: and indeed it is so in most cases; but the circumstances which may attend the occasion make great alteration. It oftentimes happens to man to have designs which require him to himself, and in their nature cannot admit of a confidant. Such for certain, is all villainy; and other less mischievous intentions may be very improper to be communicated to a second person.....when a man in soliloguy reasons with himself, and weighs all his designs we ought not to imagine that this man either talks to us or to himself; he is only thinking, and thinking such matter as were inexcusable folly in him to speak. But because we are concealed spectators of the plot in agitation, and the poet finds necessary to let us know the whole mystery of his contrivance, he is willing to inform us of this person's thoughts; and to that end is forced to make use of the expedient of speech, no other better way being yet invented for the communication of thought." Victor Hugo in the "Miserables" declared that it was wrong to believe that the soliloquy was unnatural, because often a strong agitation speaks out aloud. Prof. Bradley says; "Neither soliloguy nor the use of verse can be condemned on the mere ground that it is unnatural. No dramatic language is natural."

It is curious how when modern audiences allow many unnatural conventions on the stage, the soliloguy alone has

been consigned to the limbo of the past. In certain kinds of plays like light-comedy, the comic-opera, the poeticplay the fantasy etc., the soliloguy still plays an important part. Only in realistic prose-drama is the soliloquy completely tabooed. But even here it can be allowed in certain circumstances; for example when a mischievous character is plotting his schemes, or a man is thinking aloud about his engagements for the day, or a woman is cursing her fate when things go awry nothing is so natural as to soliloquize. Merely because the Elizabethans used it, we should not think it to be old-fashioned, and therefore reject it. It was certainly a convention in those days to have soliloquies in plays. At the present day it has become the convention not to have soliloquies! Conventionalism either way is not sound; will it not be better to leave it to the convenience and ability of writers to use what technique they choose to make their plays effective?

"THE ROAD TO MANDALAY"

By

K. NAGARAJAN.

Along this fascinating road, for ages past, have passed and re-passed, countless Indians from the coast of Coromandel. This statement ignores in advance the criticism of the meticulous-minded that Mandalay itself was only a recent creation, having been built by King Mindon in the attempted fulfilment of a dream. The road, however, has always been there and led to Ava and Amarapura, whose very names breathe romance. It held an irresistible lure for Indians and, from the deltaic regions in the south to the upper reaches of the Irrawaddy, travellers and traffickers, bards and Buddhist monks, princes and peasants from all over India have moved in an unending stream.

It all began long ago and the beginnings are lost in the mists of antiquity. The trek across the Assam frontier must have begun long before King Asoka sent his missioneries to Burma to preach Buddhist gospel. There Buddhism found a favourable field for growth. There it grew and flourished and helped to link the two countries more securely than a mere military conquest or political association could have done. Tamilnad's connection with Burma is several centuries old. Rajendra Chola, runs a well-authenticated tradition, led an expedition to Burma and proved the might of Tamil arms on the banks of the Irrawaddy. Not very long ago, there were discovered outside the city walls of

Pegu, two stone pillars erected by the Chola king to commemorate his victory. One of them used to stand in front of the District Court of Pegu, a preserved monument. There is a theory that Kidaram, one of the Chola conquests, was identical with Pegu and Kidaram is unmistakably a Tamil name. King Anahwrata, greatest of the kings of the Pagan dynasty, for his greater glory, sent to India for a wife and married Panchakalyani, a princess of Vaisali, and Kyanzhitta, the builder of the beautiful Ananda pagoda at Pagan, was her son. All Burma's legends and folk-lore are derived from India; the names of her towns and rivers—the Irrawaddy, for instance, and Ussa, the ancient name of Pegu, which was colonised from Orissa, (I am leaving out of account for the moment Chauthalon, Burmese for 'single stone,' which Chettiars have rechristened as Sivasthalam and made into the abode of the God Subramania)—attest a long and almost integral connection with India. The Talaings are believed to derive from the people of Telingana, who crossed over in large numbers, while the Corganghis doubtless came from Coringha, near Coconada. Burma has always been hospitable to her western neighbour, and it is undeniable that the intermingling of Indian and Burman has been full, free and complete. The Indians met a definite economic need; they provided the drive and the organising energy which were apparently beyond the easy-going art-loving Burmese. India and Burma were doubtless meant to live in neighbourly intimacy; the Geological Survey of India reveals the interesting fact that the terrain of Upper Burma is very similar to that of Assam. All things point to a close and considerable contact between the two countries going back to pre-historic times, a fact worth remembering at a time when twentieth-century man would play at sundering those whom God, in his wisdom, has joined.

In the unceasing stream of traffic with Burma have mingled, for longer than one cares to remember, the Chettiars or, to give them their traditional name, the Nagarathars of the ninety-six oors. It is a far cry from their sun-baked homeland in the south country to the basins of the Sittang and the Salween. It is true that nowadays one can cross over in the space of a few hours; one can board an Imperial Airways liner or a K.L.M. flying boat at Calcutta and land at Mingladon aerodrome in time for breakfast at the Strand Hotel on Rangoon's river-front or to do an early stroke of business in Moghul Street or Fychte Square. But the 'temerarious' souls among the Chettiars who would essay the (to their minds) not unperilous flight across the Arakan Yomas or the pretty paddy-fields of Hanthawaddy, can be counted on the fingers of one hand. Air-travel is still a novel form of locomotion and the Chettiars are not bitten by the modern speed-bug and they do not long to get there before anybody else. Life is long, at all events, reasonably long enough, and undue haste, when you come to think of it, is undignified, and only upsets the digestion and discomposes the nerves. They prefer to go about their business in the way their ancestors did and for the thrill of putting a girdle round the earth in lightning speed they have no taste.

This does not mean, however, that the Chettiars are not adventurous. Adventure for the sake of adventure is not their *metier*. But of risks, whether physical or financial, in the realm of business, they are wholly unafraid. They have all along been true to the old saw which exhorts the business man to seek his fortune by trading beyond the seas. In the old days, before the turbine screw was in-

vented, these merchant adventurers worshipped the tribal gods, knelt for a blessing before their elders and, bidding farewell to their family and friends, set sail from some Coromandel port and, hugging the coast, reached Rangoon after many weeks, the discomforts of the voyage by no means diminished by their enforced subsistence upon the homemade rice and curry, rendered flat and tasteless by the action of the sea-wind. In this way, they traded with Malaya and ultimately found their way to the Gulf of Martaban, on whose shores, by all accounts, the first Chettiar firms were started. Once landed, they opened their ledgers and commenced business, sustained by an infinite trust in Heaven and the confidence of the local population, to whom their proved integrity was the main passport. Wherever they went, they carried with them the sense of hospitality for which their community is noted and the mild, gentlemannered Chettiars soon found an abiding place in the affections of the Burmans. They usually laboured for terms of three years and then returned home for a three-year period of rest before going back to resume their business beyond the seas.

Herein lies the romance of Chettiar business. Romance and banking! It may seem a strange combination, as though the bamboo-mats on which they squatted could turn into magic carpets on which one could figures in their ledgers could and the turn into fairies knights-in-armour. But and if grit and guts, the readiness to take risks, great and small and the determined quest for the goods which make for beauty, quality and independance in life are the essence of romance, the Chettiars had it in ample measure. At all events, with no hint of the Biblical exhortation, they succeeded in making two blades of grass grow where there was only one or none before. And that is their magnificent record in Burma.

It all followed in the wake of the opening of the Suez Canal. On the quayside at Port Said stands a statue of Ferdinand de Lesseps. The statue, with equal propriety, could stand in front of the Sule Pagoda Wharf or the Brooking Street jetty in Rangoon. For de Lesseps was the wizard who brought prosperity to Burma. Inspired by the researches of the Saint Simonites and with the active assistance of his friend, the Khedive Mohamed Said, he set to work and, undeterred by opposition or ridicule, succeeded in cutting open a canal, of which Napoleon had dreamed and of whose immense possibilities Palmerston had more than a hazy notion. The canal was opened in 1869 and that dates the commencement of Burma's commercial prosperity. The markets of the West were clamouring for rice and more rice, far more than the East could supply. Lower Burma had a plentiful rainfall and was admirably suited for the cultivation of rice but she had never till then grown more than what was necessary for domestic consumption. But when the canal was opened she sat up and took notice. There were vast areas of malaria-ridden swamp awaiting the operations of the pioneer. An immediate programme of land reclamation on a colossal scale was taken in hand.

All this meant money and a lot of it at that. Government was either unable or unwilling to give the financial backing needed but they actively encouraged the employment of private-owned capital for the purpose. The Chettiars came forward and advanced the capital required and enabled to open up the province to agriculture. Thanks to their timely aid, cultivation went up a hundredfold: as

much as seven million tons of paddy were cultivated every year of which nearly half was regularly exported. Rangoon harbour was crowded with shipping waiting to carry the nutritious paddy stocks to the markets of Europe. All Burmese economy, in the last analysis, is based on agriculture and nearly ninety per cent of the population depend upon the land for their livelihood. Profits went up and there was prosperity all round, and the smile on the Burman's face grew larger and the lilt of his pwe dancing livelier.

It is only fair to add that the Chettiars and other Indians shared in these benefits. The Chettiars had a remarkably developed banking organisation which played a very important part in the economy of Burma. words of Sir Harcourt Butler, "Without the assistance of the Chettiar banking system, Burma would never have achieved the wonderful advance of the last 25 to 30 years. The Chettiars provide the necessary finance to the agriculturists in practically every village in the Province, and while enabling the Burman to greatly increase his production, they have, at the same time, undoubtedly inculcated ideas of thrift and economy by their insisting on regular payments as regards both principal and interest. The Burman to-day is a much wealthier man than he was twenty-five years ago and for this state of things the Chettiar deserves his share of thanks..... I feel confident that whatever future developments of banking may do for Burma, the Chettiar will always hold his own and prove himself in the years to come, as he has done in the past, the real backbone of the Banking system throughout this Province.' The Burman was not wanting in appreciation either. Chettiar firms were dotted all over the province and the utmost friendliness prevailed between the Chettiars and the Burmese. In spite of the high profits which they were enabled to earn, the Chettiars retained their characterestic simplicity and spent large sums in charity. To them might have been addressed Burns' lines:

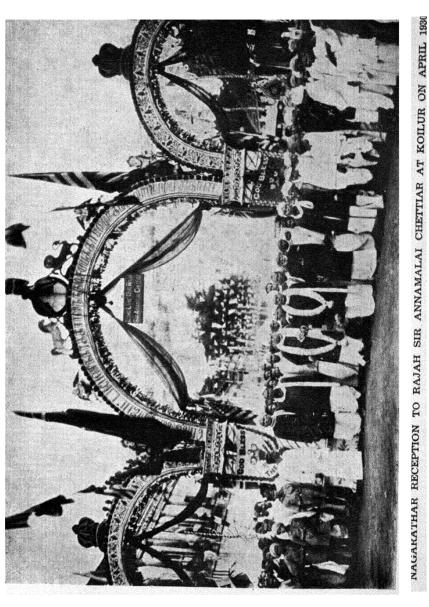
To catch dame Fortune's golden smile, Assiduous wait upon her; And gather gear by every wile, That's justified by honour: Not for to hide it in a hedge, Nor for a train attendant, But for the glorious privilege Of being independant.

"And", I may add, with apologies to the spirit of Robert Burns for the baldness of the amending prose, "for bringing a ray of sunshine into the drab lives of their poorer fellowmen."

We have good authority for saying that most of the charitable institutions in Burma, barring those of a religious character intended to secure spiritual merit, were presented by Indians: and in this laudable effort, the Chettiars have In their own homeland, they habitudone their bit. ally spend large sums of money for the extension of the amenities of life. Until recently, these were of a stereotyped character, such as, the building of tanks and temples (these latter according to the most exuberant Dravidian formula), of choultries, where the wayfarer could get food and shelter, and the promotion of fairs and festivals, beloved of the peasantry. South Indian art and architecture have in them some of their most discerning patrons, and though the rococo palaces in which an earlier generation delighted may not have been the last word in architectural

beauty, they, at any rate, provided the artisans and labouring men of Chettinad with the means of livelihood. On occasion, the Chettiars will fling their money about and forget to count the cost and organise a festival and turn the countryside over to gaiety and general jollification. As they did, for instance, when the Nagarathars of the ninety-six oors decided to celebrate the honour of hereditary Rajah conferred on the subject of this memoir, Rajah Sir Annamalai Chettiar.

For, on a memorable April afternoon in 1929, in the village of Kovilur, in the heart of Chettinad, occurred a remarkable gathering of clans. From every one of the ninety-six oors they came, flocking to participate in the honour which was being done to the man who, more than anybody else, had helped to put his community on the social map of India. The broad, water-besprinkled streets were hung thick with festoons, over which dangled innumerable fairy lamps in every shade of the rainbow, over rows and rows of tables, laden with the best cheer which the country could afford. Men of light and leading from all over the presidency had assembled to join in the demonstration, and the Chair was appropriately filled by Rajah Sir Annamalai's old friend, 'The Right Hon'ble V. S. Srinivasa Sastriar, whose appreciation of the Rajah's public spirit had been heightened into positive admiration by his magnificent endowments in the cause of education. For it was a well-known fact that the Rajah had changed the direction and quickened the tempo of the eleemosynary activities of his community. Bearing in mind the establishment of the Minakshi College, and its early conversion into the nucleus of the Annamalai University, the Right Hon'ble Srinivasa Sastriar had previously sent a telegram of congratulation which, as conveying



the general sentiment, could not have been better expressed
—"A noble deed nobly rewarded."

The Kovilur meeting was a landmark in Nagarathar history. Never before, within recent memory, had there been such a gathering of clans, or such a demonstration of unrehearsed affection for a leader of the community. Sir Annamalai, however, did not rest on his laurels. not be proper or possible to treat of the other benefactions of the Rajah or of his other services in the public cause within the limits of this article. His services to the community in regard to their interests in Burma-and, in this particular, they were identical with the interests of the country in general—can more appropriately be indicated here. It was not very long before a situation arose which laid under contribution Sir Annamalai's untiring energy and practical wisdom for the preservation of their carefully builtup interests in Burma and to this end, the Rajah devoted himself fully, freely and unreservedly.

When the Statutory Commission visited India, Sir John Simon conceived a bright idea and that was that Burma should be seperated from India. He was charmed with the province, its vernal woods, flowing rivers and its forests of virgin teak, all her untapped natural resources, and as a quid pro quo for the pleasure he had received, resolved on the snapping of old ties. The idea, once broadcast, took root, grew and became a rather noisy bee in the bonnets of a few people. Separation became a burning question at the time of the Round Table Conference. There were many in Burma who looked with definite disfavour on the idea. Mr. Ramsay MacDonald, the Premier, prescribed a test which met with general approval. He proposed to leave the decision to Burma herself. In a historic

declaration, he said, "The first step is to ascertain whether the people of Burma endorse the provisional decision that separation should take place.....The people of Burma will be in a position to decide whether, or not, they are in favour of separation from India. His Majesty's Government consider that the general decision might best be taken after a general election at which the broad issue had been placed before the electorate" and, he expressly stated, that in the event of Burma deciding to remain within the Indian Federation, "it should be remembered that if an Indian Federation is established it cannot be on the basis that the members can leave it as and when they choose." It was a time when generous ideas were in the air and the principle of self-determination so presented for practical action was calculated to satisfy all parties. Indian leaders considered it the best way of solving the problem and stood aside, waiting to see the sequel. An election was fought on the broad issue propounded by the Prime Minister and it resulted in a resounding victory for the anti-separationists. This was a rather smart smack in the face for those who had sworn that the Burmese, as one man, were clamouring for separation. Doubts were cast—vague, indefinite elusive uncertainties, impossible to lay hold of and assail—on the manner in which the election had been run. It was alleged that the issue had not been properly placed before the people and His Majesty's Government decided to ask the Council which had been elected to decide afresh on the issue. They gave their verdict in a special session of the legislature convened for the purpose in February, 1935. 37 of the elected representatives voted for remaining within the Indian Federation, while 31 voted against, but by a piece of jugglery to which legislatures with a strong nominated bloc are peculiarly susceptible, by adding the votes of non-official members, the figures given above gave place to 47 for, and 37 against, separation.

Before this, a memorandum signed by 44 of the elected representatives had been sent up to the Government, pleading for retention within the Indian Federation. The Burmese representatives who gave evidence before the Joint Select Committee, including Dr. Ba Maw, sometime Premier of Burma, were emphatically in favour of "the federal alternative as being in keeping with the clear mandate we have obtained from the country."

And yet separation was decided on. The question was hotly debated in Indian circles whether India should not enter the field against separation, and the general decision was that India should not queer the Burman pitch by any action on this side of the Bay of Bengal. The Nattukkottai Chettiar Association in Burma was greatly perturbed, and it was mainly as a result of Rajah Sir Annamalai's attitude, which was in conformity with the general view of the Indian leaders, that the Association stood aloof.

Detachment in regard to the issue as to separation did not dispose of the matter. The recommendations of the Joint Select Committee gave rise to apprehensions that the future of Indians in Burma would be gravely jeopardised. There was no cleavage of opinion in any particular among the Indians in Burma as to the dangers inherent in the position envisaged by the Joint Select Committee, and it was decided that steps should be taken to safeguard the position of Indians in Burma. An All-Burma Indian Conference was held at Rangoon on the 29th and the 30th December, 1934, and it was presided over by Mr. Mirza Mohamed Rafi, Mayor of Rangoon who had been associated with the

Burma Round Table Conference. Mr. S. A. S. Tyabji, who was recently in India at the head of a Delegation from Burma to protest against the Indo-Burma Immigration Agreement, was the Chairman of the Reception Committee. Various resolutions were passed and a Delegation was appointed to proceed to England for the purpose of making representations to His Majesty's Government with a view to securing adequate safeguards.

The Delegation left for England in February 1935. Meanwhile, The Government of India Bill had been published and the apprehensions expressed at the Rangoon Conference were found to be justified. The provisions enabling the Burmese legislature to impose restrictions on the rights of Indians to enter Burma and on the right of alienation of land were calculated to cut at the root of Indian business in Burma. That Indians would be subject, in the future, to highly discriminatory treatment was a conclusion from which there seemed to be no escape.

From the start, it was clear that the position called for careful handling. The delegation held several discussions in Bury Street among themselves and the task of negotiating a satisfactory amendment of the Bill fell upon the shoulders of Rajah Sir Annamalai Chettiar.

Rajah Sir Annamalai actually arrived in London on February the 23rd, and lost no time in getting into touch with the India Office and leading members of Parliament. He met the Right Hon'ble the Secretary of State and Mr. R. A. Butler, the Under Secretary, both of whom he was able to impress with the strength of the Indian case. He also took an early opportunity of meeting Earl Winterton and discussing with him the questions agitating

the Delegation. Very early in the proceedings, the delegation had the advantage of a thorough examination of the position with Lord (then Sir Malcolm) Hailey, and it looked as though modification was possible of the clause relating to land alienation and, as to Indian immigration, all that the Government apparently had in mind was the conferment of the right to restrict the immigration of unskilled labour into Burma.

In addition to the two points indicated already, Sir Annamalai was definitely of the opinion, that it was a matter of the first importance to Chettiars, that they should have separate representation in the Burmese legislature. The enormous interests which they owned in Burma were held to justify the reservation of a seat for the Nattukkottai Chettiars' Association, Burma.

While in London, Sir Annamalai's attention was drawn to a serious omission in the safguarding provisions of the Bill. While a certain degree of security in regard to the carrying on of trade and business and connected matters was guaranteed to British Indian subjects, no such safeguard was provided in the case of subjects of Indian States similarly situated in regard to Burma. Knowing the commitments of the Chettiars of the Pudukotah State, and of the large numbers of men from the States of Western India who had been carrying business in Burma for generations, Rajah Sir Annamalai was quick to realise the gravity of the omission and he forthwith took the matter up with the Secretary of State. The omission was repaired by the Government themselves introducing the necessary amendment.

Several informal discussions were held with the India Office authorities who displayed, in the words of the Rajah, "a gratifying readiness to appreciate the Indian case and to do what they could do to safeguard Indian interests in Burma." His discussion with Mr. Geoffrey Peto, M.P., Mr. Kirkpatrick, M.P. and the Right Hon'ble Major Hills were particularly helpful.

The discussions disclosed that the Government were not unalive to the risks involved in leaving the clauses on land alienation unrectified. These clauses were so framed as to give the Burmese legislature freedom to promote legislation prohibiting the sale or mortgage of lands to persons who were not agriculturists. Sir Annamalai drew pointed attention to the large accumulations of land in the hands of Indians, as a result of circumstances, purely fortuitous. To any one who knew the real position, it was crystal clear that land was the last thing which the Indian business men wished to own in Burma, and that it was their main purpose and preoccupation to get rid of the lands which had, so to speak, come unsought into their possession. Rajah Sir Annamalai was able to convince the Secretary of State that Indian landowners in Burma were not land-grabbers and that, though as landlords, they had been markedly considerate to their tenantry with whom their relations were. on the whole, extremely cordial, they did not fancy the role which accident had thrust upon them. He pointed out that the restrictive legislation foreshadowed would result in an artifical restriction of the land market and a serious reduction of land values. He suggested that the desired protection of agriculturists from the consequences of their improvident dealings with land could be achieved by preventing the sale or mortgage of land in the hands of the agriculturists to anyone who was not an agriculturist himself. The suggestion commended itself to the Secretary of State and the clause in question was amended in the sense indicated.

Clause 340 disturbed the delegation a good deal. It began well, it conceded to Indians the right to reside in Burma and to carry on trade or do business, without any restriction whatsoever: it put the Indians exactly in the same position as subjects of the United Kingdom in regard to these and cognate matters-but with a difference. The clause contained a proviso that all the rights conceded by the clause were subject to "any restriction on the right of entry" or "any condition lawfully imposed as a condition of entry" which the legislature of Burma might impose. Therein lay the rub. The clause seemed designed to have the effect of taking away with one hand what had been given by the other. Representations were made to the Secretary of State about the unfairness of such a provision and the reply was given that it was felt that there was an uneconomic excess of cheap, unskilled Indian labour which flooded the Burmese market and that the clause was designed only to enable legislation restricting the immigration of unskilled labour from India. Rajah Sir Annamalai and Mr. Haji drew attention to the fact that there was nothing to show that Indian labour was assuming menacing proportions but, on this head the Government was firm; but, at the same time, they made it perfectly clear that it was not at all their intention to strike at other Indians, who would be at perfect liberty to come and go as they please. This assurance was repeated at the formal interview which the Delegation had with the Secretary of State.

The delegation was strongly of the opinion that, in that case, the matter should be placed beyond the possibility of doubt by a suitable amendment of the proviso. Lord Winterton and Mr. Godfrey Nicholson were good enough to table amendments in the sense that the Burmese legislature may promote legislation designed to restrict the

immigration of cheap unskilled labour. When the clause came up for discussion, the Attorney General, Sir Thomas Inskip dealt with Lord Winterton's amendment and observed that "it passed the wit of parliamentary counsel or draftsmen to devise a form of words" which would adequately define the phrase "unskilled labour" and that therefore the best plan would be to instruct the Governor to reserve any Bills which contain racial discrimination and to reserve also Bills which contain restrictions upon professional or business men who, while India and Burma have been united, have carried on business in either country." Sir Samuel Hoare, the Secretary of State, referring to the discussions which he had had with the delegation said that he was able to convince them "that the best way of meeting their anxieties was to adopt the method of the Instrument of Instructions." After such a full and clear statement of intention, the delegation felt that there was no further need to be anxious on this score. Moreover, when the Instrument of Instructions was under consideration in the House of Commons, in November 1936, Mr. Butler observed that the fears entertained "on this score by Indians who wished to enter Burma may be quietened in view of the contents of Paragraph XX of the Instrument of Instructions." He added that "the reason that we cannot make a simple rule is that we have to make this differentiation in regard to unskilled labour while, at the same time, we do not want to stop the free entry of Indians in general." It was assumed that these assurances given by such high authorities would, in the words of Mahatmaji "have the effect of promissory notes." The delegation had not the slightest suspicion then that a day would come when these assurances would be ignored and that Government would take its stand on the letter of the law which was, after all, like advancing a plea of limitation to defeat a just debt. It may be a promissory note, but some people always ask, "Is it in the bond?"

Rajah Sir Annamalai, while he was in England, pleaded for separate representation of the Nattukkottai Chettiars' Association in the Burmese Legislature. He was able to present his case with such reason and moderation that the Government readily accepted his suggestion. In moving the amendment Mr. R. A. Butler, the Under Secretary of State said "The Chettiar Association have a very important position in Burma. It is composed mainly of merchant bankers, who perform services absolutely vital to Burma. It occupies a very important position in the national life and performs duties which Burma can ill afford to lose."

It may be worth recording in this connection that after Rajah Sir Annamalai had left, Mr. R. A. Butler told the present writer (who had the privilege of being associated with the delegation and particularly with the Rajah all through) that it was a pleasure to conduct talks with the Rajah who had always "put his case moderately" and hoped that his labours will be appreciated in India.

Mr. Butler's hope was justified. On his return to India the Rajah was the recipient of letters and telegrams expressing the warmest appreciation of his work.

A special meeting of the Nagarathars was held at Kovilur where a resolution expressing the community's appreciation and gratitude was formally passed. The *Hindu* was appreciative and stated in a leading article "that the concessions that have been gained are valuable. They, in fact, make it clear that the authorities in England are convinced that every one of the claims made by Indians is wholly justifiable."

Since separation new problems have arisen and the Rajah has always been ready to tackle them as and when they arose. In 1937, an attempt was made to tax agricultural income which had accrued to Indians in Burma in 1936. This was indefensible as, under the Indian Incometax Act, agricultural income is exempt from liability for incometax and in the 'previous year,' which was the accounting year Burma was a part of India. The Rajah was almost the first to perceive the point and he took the matter up in his capacity as the President of the Nattukkottai Nagarathar Association with the Central Board of Revenue and also submitted a memorial to His Excellency the Governor-General-in-Council. It is gratifying to be able to record that the Government of India directed the cancellation of the levy.

Land legislation became a vexed question in Burma and came to be taken in hand in 1938. The question was whether occupancy rights were to be given to Burmese peasants and what steps should be taken to protect them from the consequences of their improvident dealings with their land. The System of landholding in Burma is ryotwari and virtually modelled on the Madras system. Rajah Sir Annamalai Chettiar and his fellow-Nattukkottai Chettiars were in entire sympathy with the promotion of schemes calculated to improve the economic position of the Burmese peasant. But they pleaded that the methods adopted should be such as to achieve the object and at the same time be above reproach. He cited the example of the Malabar Tenancy Act and indicated that the remedy lay in the direction of providing for something like an option of renewal on a fair and equitable rent, to be settled by the Revenue Officer assisted by a kind of local jury, and

for equitable enhancement. The main thing to be guarded against was unconditional or improper ejectment. One point which Sir Annamalai has always stressed is that the Indians ought to be prepared to part with their lands in their possession at the earliest opportunity—a view in which the Indian community are in entire accord.

Many and various are the practical problems which Separation has brought to the fore and these require to be studied with care and dispassion. Rajah Sir Annamalai keeps an alert and watchful eye on them and has been ever ready and willing to take steps for their preservation.

The need for vigilence and vigorous action has never been greater than at the present moment. We have all heard of the Indo-Burma Immigration Agreement which was recently concluded between the Government of India and the Government of Burma. The whole matter is, in a manner of speaking, subjudice, but there can be no harm in saying that the whole country is cursing it by bell, book and candle. The strongest criticism to which there has, so far, been no answer is that the agreement runs counter to the assurance given in and outside Parliament that the checks on Indian Immigration would be limited to the case of unskilled labour.

A public meeting was held in Madras on the 28th of July to condemn the agreement. Sir Mahomed Usman presided and expressed his disapproval in no uncertain terms. Kumararajah Sir Muthiah Chettiar, Rajah Sir Annamalai's son, who has already made a name for himself by his philanthropy and public spirit, subjected the agreement to a scathing analysis. A strong and influential Committee has been appointed to take steps to obtain a rectification of the agreement. Rajah Sir Annamalai, naturally, is on this

Committee where his intimate first-hand knowledge of affairs is found to be of great practical help. Along with other members of the deputation, he waited on His Excellency the Viceroy and presented the case for India forcefully and yet fairly.

A Delegation from Burma was in Simla recently and Bombay and Bengal have taken up the matter vigorously. It is hoped that the joint labours of the various bodies which have taken up the matter will result in the substitution of an arrangement which will be in consonance with justice, equity and good conscience. Sir Annamalai's own feeling is that "someone has blundered". The Burmese people acting in consultation with Indians would have been able to produce an arrangement fairly and reasonably reconciling their different claims. The Burmese, he is convinced, have nothing but the liveliest affection for the Indians, based upon an intercourse which goes back through the ages and will not readily consent to cut the painter regardless. They are not at all likely to contemplate with equanimity the cessation of the free flow of thought and commerce which has characterised the relations between the two countries. And, as for the Indians themselves, they can never forget what Burma and the Burmese have meant to them, and whatever happens, mingling with the wind in the palm-trees and the tinkle of the temple-bells, the voice of the kindly Burmese people will be wafted over the waters of the Bengal Bay.

"Come you back to Mandalay,
Where the flyin'—fishes play,
An' the dawn comes up like thunder outer China
'crost the Bay!"

THE LIBRARY MOVEMENT IN INDIA—SOME ASPECTS

By

K. NAGARAJA RAO M.A., B.L.

The Library Movement means the education of the masses with the aid of Libraries and the scope of the subject is confined to popular public libraries and other subjects like the Commercial, Special, National, University, Prison and Hospital Libraries are excluded. The oft-quoted dictum of Carlyle "The true University of these days is a collection of books" is only a half truth. "A collection of books is neither more nor less than—a collection of books, no more a library than a heap of bricks is a building. The books, qua books are little or nothing—they must be made productive by the work of the Librarian, books selected, classified and catalogued and intelligently displayed. That is a library" (Stanley Jast:—Libraries and Living, page 4).

It was in the year 1910 the modern Library Movement began in our country when that enlightened ruler and sagacious statesman, the late Sayaji Rao Gaekwad brought the American Librarian, Borden to introduce and plan modern libraries in his state. To him belongs the credit of having inaugurated the Library Movement in our country. Libraries were long ago recognized as important auxiliaries to any system of national education in the European countries and the State financed and maintained libraries which became effective instruments of adult education and centres of learning. On account of the cultural value and immense influence on the people the library

movement in the West converted a great majority of nationalities into literate citizens who were fully able to appreciate the significance of political and social rights they were capable of enjoying under democratic governments. A brief review of the progress of Libraries in a few European countries may help us to understand the problem better.

Belgium is the oldest country to have developed the public library in the 14th and 15th centuries. So early as 1772 Maria Theresa opened the Library of the Dukes of Burgundy and in 1792 the National Convention decreed "There shall be close to every school a public library and a small museum of national history." The Teaching League took an active part in the 19th century, in 1920 every Commune was obliged to start a library if 1/5 of the electoral body demanded it. In 1929 for a population of 8 millions there were over 3.8 million books and 2,188 public libraries.

Equally interesting is the progress of Bulgarian Libraries which were founded in 1856 and paved the way for future democracy. "The Public Libraries were miniature departments of Education, who appointed teachers, provided poor students with text books and clothing, founded the Bulgarian Academy of Sciences at Braila.....Bulgarian national drama and theatre were rostered within the walls of the libraries"—Bostwick—"Popular Libraries of the World" pages 36 and 37. Portions of state lands were set apart out of revenues, of which the libraries were maintained.

In 1920 68 per cent of the population of the Soviet Union were illiterate and the work of the Commissariat of Education was the education of adult population and "creation of centres for the liquidation of illiteracy; political, cultural clubs and reading rooms (Lenin Corners); workers and peasants' houses; permanent and itinerant libraries;.....

quick learners help the slower; semi-illiterates the illiterates." Good (W.T.) "School Teachers and scholars in Soviet Russia" pages 61-63. Thus over ten million people were taught to read and write and the love of books was such that even in lobbies of Cinemas there is a Reading Room to keep the visitors occupied in the intervals of performances, and the number of literates has come up to 90 per cent in recent times because the Soviet Libraries were an active social and educational force.

In England the Public Library Act was passed in 1850 and from that time onward the state has undertaken the maintenance and control of libraries. By 1927 with the benefactions of Andrew Carnegie the whole country was covered with a network of county libraries, the next stage being the establishment of Regional System of Co-operation and National Central Library. Sir Frederick George Kenyon, Director, British Museum, in his Message to Indian Library Association states "You in India can profit by our experience. It may take generations to form a library system to cover this vast country. The lesson of Librarians is mutual help and common service to entire nation and mankind."

When compared to this state of affairs elsewhere the Library movement may be said to be still in its infancy in our country. Judged by the literacy test in the last decade which is only 8 per cent for the whole of India (though a few states fare better) the gulf separating the educated and the uneducated is so enormously wide and no society or nation can be said to be civilized or enlightened under such conditions.

The Indian peasant is steeped in ignorance, superstition and bigotry in addition to his proverbial poverty. A com-

pulsory (not optional as it is now) system of primary education can surely eradicate the evil but without the aid of libraries, even this will be useless. The Government Reports of Education Departments have often deplored the lapses into illiteracy in the stages of primary education. The dictum of Loe Strachey (Editor of the Spectator)-"To educate people and not to provide them with tools to work with (books) is obviously an absurdity, if not a crime" still holds good. The only solution and immediate need of the hour is the establishment of village libraries whereby the wastage of money on primary education could be avoided and full benefits be reaped by the villager. The economic, cultural and political advancement of our country is closely connected with the education of the masses and libraries play the most important part in this nation-building activity. It is for the State to maintain and build up as many libraries as possible or to initiate legislation to enable local authorities to raise funds by taxation.

Let us examine if this movement is entirely foreign or if there are traces of libraries in our country in ancient days. Long ago our venerable sage and lawgiver Manu declared that to carry knowledge to the doors of the poor was the greatest act of charity a nation could be capable of doing and knowledge was imparted in very ancient times by word of mouth before the days of printing.

Literature and learning were the sole monopoly of the priestly classes who carried the whole of the Vedas in their memories and were thus Ambulatory Librarians. Even to this day we find traces of them in the Dwivedi and Trivedis of Gujarat. The secular literature was spread by the bards who were entertained at royal courts and sang the exploits of warriors. It was from the amalgamation of these epics we get the Mahabharata.

From the accounts of the Chinese pilgrims Fa-hien, Hiuen Tsiang and I-tsing of the 5th and 7th centuries we get some description of libraries in the Universities of Nalanda, Taxila and Pataliputra. The Nalanda University had a library in a nine storied building with 300 apartments.

In the Inscriptions of Nagai published in 1928 (Hyderabad Archaeological Series No. 8 pages 7 and 40) under the Chalukyan king of the 11th century we find "Equipment of a Library (Sarasvati bhandara) with Librarians who were called Sarasvati bhandarikas." There were six of them who with six other teachers were teaching a body of 252 students. King Bhoja is said to have had a big library.

Under the Mohammadan rule we find emperors taking interest in Hindu books and Kalilah Damnah was translated into Persian as Anwar-i Suheili. Jalaluddin, founder of the Khilji dynasty, appointed the reputed poet and scholar Amir Khusru as his Imperial Librarian and raised him to the status of a peer. In the Bahmini dynasty there was a big library at Ahmednagar. Mohammad Gawan who lived in the 15th century was the Andrew Carnegie of those days. He was a minister and poet who built a number of libraries. At Bijapur there was a library under the Adil Shahi kings.

Fergusson an English architect who visited the place in the 19th century concluded from the ruins that it must have been a fine library.

Among the Moghul kings Great Akbar was an enthusiastic bibliophile, who acquired the library of his minister Faizi and also the Library of the Gujarati king whom he conquered. It was in his reign we have the practice of illuminating books with pictures and much attention was paid to sumptuous bindings. The recent work of historic importance throwing light on miniature painting and book

decorations of the ancient Persians is that publication of the Oxford University Press under the editorship of Pope (Survey of Persian Art, Volume III). Humayun also was a lover of books. There seems to have been some system of classification also. Books were divided into three groups (1) Poetry, Medicine, Astrology and Music, (2) Philology, Philosophy, Sufism, Astronomy and Geometry, (3) Commentaries, traditions, theology and Law. It is too much to expect that the equipment, methods and ideals of modern Library service were prevalent in our country long ago.

Coming to recent times in the pioneer State of Baroda there are over 1,100 Village Libraries for a total of 3000 villages in the State and the system of State grant is as follows. In District towns the Government gives a grant of Rs. 700 provided the people raise Rs. 700 and local boards contribute an equal sum of Rs. 700. In the case of less important towns the amount is Rs. 300 and for villages 100 with equal contributions from the people and local boards. Similar rules apply for buildings also (Rs. 1000). On marriage occasions a small fee is collected for libraries. The travelling libraries are maintained solely by Government. With its network of village and town libraries, Baroda is the most advanced state in our country and serves over 82 per cent of the state population.

Another American A. D. Dickson reorganized the Libraries of the Punjab in 1915 and started training classes. In 1929 there was a Librarians' Club in Lahore which ultimately developed into the Punjab Library Association and Modern Librarian is the leading journal in the field now. In 1932 the Indian Library Association was formed which has held four conferences. The compilation of a Union Catalogue of Scientific Periodicals, a Scheme for inter-loan

of books, expansion of Dewey System to suit Indian subjects are some subjects on which it is at work. It has also taken up the establishment of provincial copyright libraries in the provinces.

Much useful work has also been done by the Library Associations of the Provinces of Madras, Bombay, Bengal Bihar and United Provinces. The Andhra Desa Library Association has been organizing libraries amongst the Andhras north of Madras. The All Kerala Library Association is doing much in the States of Travancore and Cochin.

The Governments of the Punjab, Bombay, Bihar, United Provinces and Madras are doing some efforts for establishing libraries in rural parts; but still much remains to be done and there is enough scope for private philanthropy to undertake this work of national reconstruction.

'THE CARTESIAN 'COGITO'

"A Critical Evalution"

By

P. S. NAIDU, M.A.,

wind-matter dualism, it has been argued, is the hidgen rock on which many systems of European thought have been wrecked. It has raised so many insoluble probiems that one looks aghast at the dead wall to which one is led up if its implications are uncritically accepted. Courageous attempts have been made to break through this wall by denying the one or the other element in the dualistic partnership, or by reducing one to the status of a mere function or even an appearance of the other. But these attempts have been sorry failures. What is ejected out of the front creeps in by the back door. From Plato down to Bergson dualism has persisted in some form or other. Mind and Matter; thought and extension; substance and attribute; reality and appearance; phenomenon noumenon;—these are a few of the many forms which the dualism has assumed. Of these mind-matter dualism is the most refractory type. We do not propose to tackle this problem in this very short paper, but shall attempt to deal with something which is much simpler, but at the same time very important for a general understanding of the problem in its proper perspective. We shall deal with the metaphysical origins of this problem in Cartesian philosophy.

Dualism of mind and matter has been a most unwelcome legacy to the long line of European thinkers. It haunted the minds of philosophers and psychologists, and produced bizarre hallucinations and strange delusions. Its remote origins are, no doubt, lost in the dim past of ancient Greek speculations, but its immediate ancestry may be readily traced to the 'father of modern philosophy'. Renes Descartes it was who gave it philosophic standing, and since his time it has been a thorn in the side of the philosopher.

There are critical thinkers who believe that it is not the method of doubt, not the 'cogito ergo sum', but the dualism of mind and matter that is the foundation for Cartesian philosophy. It is a datum, and not a deduction, say they. The steps in the proof, though styled deductive, by which Descartes passes from the self to the external world on the one hand, and to God on the other, are so many immediate intuitive apprehensions, and not syllogistic deductions. Each step in the demonstration, Descartes himself holds, shares the compelling character of the 'cogito'. We are prepared to admit this, but we are forced to agree with the critic who says that unless a dualism is postulated as a pre-condition of the demonstration, the conclusion cannot be obtained. Descartes contends that the 'cogito' is an axiom in the strictest mathematical sense. Even so, all that the Cartesian deducation can establish is that there is a material world and that our knowledge of it is not deceptive. How that knowledge is possible at all is not made clear.

The whole difficulty arises out of a subtle unanalysed fallacy in the 'cogito' itself. When Descartes argued, "I think; therefore, I am," he created an unbridgable gulf between the subject who thinks and the object of his thought. Thereafter a reconciliation between subject and object could be attempted only through some such highly mechanical and artificial device as the 'Deus ex machina' of Occasionalism.

The situation became so distressing that Spinoza had to adopt very desperate measures to rescue the toundations metaphysics. As an alternative to occasionalism Spinoza chose the device of raising the methodological principle of universal Cartesian doubt to the status of a meta-physical principle. He stated it in the form so well known to us, 'All determination is negation.' But in doing so he emptied his central metaphysical concept of all content. It is true that dualism of the Cartesian type is eliminated here, but the conception of the absolute which Spinoza arrived at by thinking away all its determinations is so significantly empty of any content that a learned philosopher remarked that it is 'the empty idea of being, which idea is indistinguishable from the idea of empty being.' If, therefore, we exclude from the absolute completely the positive element which the relations of the finite supply, we must find ourselves confronted by an unknowable absolute—an absolute which because it leaves the finite unexplained is philosophically useless, and which because it excludes the finite from itself is faced by it as an other, and so ceases to be absolute. This is the final conclusion if we accept the rigorous exclusion of determination championed by Spinoza and others in the same line of philosophic thought.

But, even so has Spinoza succeeded in maintaining consistently the position reached by systematic deduction from his metaphysical principle? Alongside his empty absolute he postualtes 'God' with innumerable auspicious qualities. The dualism which Spinoza sought to overcome by reducing thought and extension to the subordinate status of attributes of the absolute now reappears in another form. And this persistent dualism may in the last resort be traced to the Cartesian 'Cogito'.

How are we to break through this dualism? Leibnitz. the third in the line of European rationalistic succession, attempted to resolve the difficulty by taking up relation into substance itself, and by attempting to reconcile the idea of substance as a continum with that of substance as composed of discrete elements. We have seen already that Descartes created a gulf between subject and object, and then struggled to bridge it by interactionism. The cartesian system is predominantly logical, and so efficient causation has no place in it. Yet efficient causation is introduced by Descartes and made to function in an illogical manner. Spinoza efficient causation has no place at all. Has not Spinoza definitely thrown out interactionism, and chosen logical ground and consequence instead of cause and effect as his guiding principles? But this discarded element suddenly makes its appearance in the Spinozistic doctrine of modes. Leibnitz shrewdly noticing these defects in his predecessor's systems, proposed to take up efficient causation into his principle of sufficient reason. But in the Monadology of Leibnitz the principle of contradiction plays an important part. And Leibnitz is unable to bring this principle into harmony with efficient causation. And finally we are landed in the grand Leibnitzian doctrine of 'Preestablished Harmony'. Moreover the Leibnitzian denial of the reality of space is in response to the demand made by the very definition of the Monad itself. The philosophical quagmire into which our thinker lands himself may be traced to his incapacity to resolve the two principles of contradiction and efficient reason in a higher synthesis. treated these as merely two aspects of self-consciousness he would have had no difficulty at all in his metaphysics.

And that takes us back to the beginning of our story. The blame for all the ills that European rationalism is heir to may be laid at the door of Descartes. The Cartesian Cogito, and the assumption that the rationality of the universe may be deduced from this principle are the sources of all these difficulties. It was open to Descartes to have made the right start by taking the rationality of the universe or the veracity of God as the indispensable first principle or the unquestioned datum. Then the scio, and not the cogito would have been the ruling doctrine in Cartesianism. And in the scio Descartes would have found such a vital union betwen subject and object as would have made the dualistic position absolutely impossible. The cogito necessarily resolves into a subject who perceives his own ideas which may or may not be true representations of the reality outside, whereas in the scio we have a subject who knows objects. Representationism could have been completely avoided by making the fact of knowledge instead of the fact of thinking the central point in the datum.

The cogito with interactionism as its prop challenges parallelism and brings this into prominence, and finally evolves into pre-established harmony. Throughout the course of this evolution the principle of efficient causation championed by science is making its appearance at critical points in a most inconvenient manner. All these unreconciled and irreconcilable logical and psychological principles may be resolved in a higher synthesis if we make 'I know' instead of 'I think' the starting point for a rationalistic philosophy.

ORIGIN OF BURMESE COMPETITION IN MADRAS RICE MARKET

By

B. NATARAJAN, M.A.,

Lecturer in Economics, University of Madras.

For a long time the city of Madras and the coastal districts to the north do not appear to have been self-sufficient in the matter of food supply. An English writer of the 18th century refers to its dependence on foreign supplies of food grains and the consequent vulnerability to an economic blockade:

"Madras, with most other places on the Coast of Corromondel (which is in general barren and does not produce grain enough for the subsistence of its inhabitants) is obliged to be yearly supplied from the more fertile coasts of Orissa and Bengal, with vast quantities of rice, which is the chief food of the most of the people in the East Indies; so that an Enemy that is superior at sea, may easily distress them very much, by taking the vessels laden with rice coming from the Northward."

Among the records of the East India Company we find statistics of the import of "rice, wheat and all other grain and pulse" from 1796-97 to 1828-29. These statistics prepared by the elder Mill, in his capacity as the Examiner of

1. A Narrative of the transactions of British Squadrons in the East Indies during the late war: By an Officer who served in those Squadrons (1751), p. 30.

India Correspondence, does not give the import figures for rice separately, but it is certain that the bulk of it consisted of rice. The following figures give the periodical averages of import in quantity and value of grains from "the several ports of Bengal to the several ports and places on the Coromandel coast" from 1796-97 to 1828-29.²

Years	Period Years	Average No. of Bags	Average No. of Maunds	Average Value
A CONTRACTOR OF THE PROPERTY O				Rs.
1796-7 to 1800-1	5	3,56,189	7,12,378	6,93,047
1801-2 to 1805-6	5	5,55,495	11,10,990	11,12,813
1806-7 to 1810-11	5	6,24,916	12,49,812	13,29,812
1811-12 to 1815-16	5	3,55,124	7,10,247	7,12,208
1816-17 to 1820-21	. 5	97,732	1,95,464	1,95,464
1821-22 to 1825-26	5	2,87,794	5,94,364	8,63,735
1826-27 to 1828-29	3	39,364	78,306	1,24,523

A closer study of the statistics shows that these imports came to meet a real want since they had been the heaviest in years when the Presidency or parts of it were experiencing a drought or famine, as in 1806-7 and 1807-8, in 1812-13 and 1813-14 and in 1823-24 to 1825-26. The imports were confined to the city of Madras (and its vicinities including Chingleput and North Arcot Districts) and to the northern districts such as Godavary, Kistna, Vizagapatam and Ganjam. In the south, Tanjore was acting as a great granary and was even exporting to Ceylon. On the West Coast, Canara

 Compiled from the Report of the Select Committee of the House of Commons, 1832, Appendix No. 109. was exporting rice to Arabia and Bombay.³ The Ceded Districts received their supplies mainly from Mysore. The markets of Tanjore and Canara would have met the internal demands had there been an adequate development of inland communications. However, up to about 1825 rice imports from Bengal were regular. "A large fleet of dhonies regularly plied between the Coromandel Coast and Bengal conveying salt to Calcutta and returning with cargo of grain. Their chief resort was the port of Coringa from which place grain could be distributed not only throughout the Northern Circars but also through Hyderabad.⁴

In the twenties, a new source of supply for rice sprang up from Burma, which ultimately displaced Bengal as an exporter. It subsequently assumed such proportions during the economic depression that prevailed in the Madras Presidency during the years $1825-54^5$ that an analogy as to its effects can be found only in the Burmese imports of rice in the recent depression. History repeats itself.

The development of rice trade in Burma reads like a romance. In 1826 the provinces of Arakan and Tenasserim were annexed by the British. At that time they were so thinly populated and undeveloped that it was seriously con-

- 3. Evidence of Mr. Hodgson to the Select Committee of the House of Commons, dated May 1830.
- 4. Henry St. G. Tucker: Memorials of India Government, p. 461.

The important part played by the port of Coringa (near Cocanada) in the commercial intercourse with Burma is seen from the fact that even to-day Telugu labourers from whichever part they come are called Corangees by the Burmese.

5. Thomas and Natarajan: Economic Depression in the Madras Presidency (1825-54), (Economic History Review, Vol. VII No. 1.)

templated whether they should not be restored to the Burman king. But in the subsequent thirty years the two provinces witnessed unparalleled economic development under the aegis of British rule.⁶ Vast tracts of virgin soil were brought under the plough and sown with paddy. The total increase in the cultivated area in Arakan alone between 1826 and 1855 was 250 per cent.

STATISTICS SHOWING THE GROWTH OF PADDY CULTI-VATION AND LAND REVENUE IN ARAKAN (1826-55)

Year	Area of assessed cultivation (Acres)	Land Revenue	
		Rs.	
1826	66,227	2,32,250	
1835	133,952	5,28,320	
1845	233,769	6,84,550	
1855	353,885	12,77,290	

A similar development took place in Tenasserim also, where the land revenue from cultivated area rose from Rs. 26,760 in 1825-26 to Rs. 8,33,000 in 1855-56. In 1843 the acreage under cultivation was 1,00,657. In 1855-56 it rose to 1,81,681. Meanwhile population also grew but not at a pace to substantiate the truth of the Malthusian law. While the density per square mile increased from 5.5 and 2.5 in 1826 to 20 and 7 in 1855 in Arakan and Tenasserim respectively, the area under cultivation increased at a faster pace in the newly developing country.

^{6.} Col. A. Fytche, Chief Commissioner, British Burma and Agent to the Governor-General: Memorandum on the comparative progress of the Provinces now forming British Burma under British and Native Rule, 23-8-1867.

An increase in the two factors of production, land and labour, under British political organisation resulted in intense exploitation of resources. Till then these provinces had few ports of importance and the number of vessels which called at those ports were few and far between; now they saw the rise of Akyab in Arakan and Moulmein in Tenasserim. The former reached a population of 20,000 during the period and the latter from a fishing village became a port of 60,000 inhabitants. In 1855 the value of trade of Arakan amounted to Rs. 187,69,980 and that of Tenasserim to Rs. 83,63,050. The increased production of rice found an outlet in the markets of Madras and northwards.

A number of factors helped to give a fillip to the Burmese export trade in grain. Firstly, the landholders in British Burma had numerous advantages over those in Madras. The swamps of Arakan required but little manual labour to ensure abundant crops. The land tax was no more than a fourth of what it was in most parts of the Presidency. Waste lands were granted on very tavourable terms. Lands were divided into 5 classes according to fertility and were given rent-free for periods varying from 4 to 34 years. After that assessments starting with a minimum of 6d. per acre were levied and they increased at a progressive rate within a period ranging from 8 to 64 years as the case might be, until the maximum of 1s. 6d. per acre was reached. Even at that stage one-fourth of the holdings was permanently held free of assessment.

Secondly, the prices that ruled in the markets of the Madras Presidency were higher than those obtainable in the

^{7.} Madras Public Works Commission Report (1852), p. 129.

^{8.} Nassau Lees: Land and Labour of India (1861).

home market; and the higher the price in the Indian market due to scarcity or famine, the greater the incentive to export from Arakan. Thus, for instance, in 1846 rice was selling at Arakan at 1 rupee per maund while in Madras it fetched 1 pagoda per maund; in other words it was $2\frac{1}{2}$ times as great.

Thirdly, the freight charges from Arakan to Madras were not considerable. Paddy treight took the position of a ballast to vessels which returned to Madras to take salt to Calcutta. Freight facility was even a greater advantage in those days when inland communications were undeveloped.

Fourthly, grain from Arakan was a commodity on the free list, except in the port of Magras, where it was subject to a duty of 5 per cent. The home grown produce, on the other hand, was subject to a duty of 3 per cent ad valorem on all inter-portal shipments as well as on internal transit of grain from one place to another. This was an important factor in keeping supplies from Tanjore and the southern districts off the markets northward of Madras. The "protection of distance" that domestic production would otherwise have enjoyed was thus denied to them.

Finally, the frequent famines to which the country was subject in those times disposed the Government to encourage this import trade, inspite of the fact that they were rast wedded to *laissez jaire*. In 1824 when famine threatened the Presidency, Sir Thomas Munro, the then Governor,

^{9.} Friend of India, 8-1-1846.

^{10.} CIV Regulation II of 1812; Sections 4 and 17, clauses 8 and 13.

threw the official laissez faire policy to the winds and said that State interference was permissible when "the lives of a great population are at stake." He therefore recommended a reduction in the price of salt taken to Bengal on condition that the controllers of the carrying trade agreed to return with a cargo of rice. This was in effect a bounty to the Arakan trade. Next year, finding this inadequate, he granted a direct bounty of Rs. 30 per garce of rice imported, which according to his estimate involved the Government an expenditure of 3 to $4\frac{1}{2}$ lakhs of rupces per annum. This was a temporary measure, but it no doubt introduced the thin end of Burmese competition. When these preferences were repeated in 1832, as the coming famine of Nandana year (1833) cast its shadows before, they opened the flood-gates of foreign competition.

The Arakan imports which thus came to succour stayed to compete with local production. Although the cheap import was not a cause of the depression, it was one of those factors that kept the prices low and held up economic recovery unduly. In 1843 the Collector of Rajahmundry drew the attention of the Board of Revenue¹⁵ to this disturbing element and the Board, convinced that it was an important factor deserving their consideration, ¹⁶ addressed the Dis-

- 11. Minutes of Sir Thomas Munro, 23—1—1824. Also, vide B. Natarajan: Economic Doctrines of Sir Thomas Munro, Father Carty Commemoration Volume.
 - 12. Ibid.
 - 13. Ibid.
- 14. From the Government of Madras to the Board of Revenue, In Consultations, 17—12—1832.
- 15. Settlement Report of Rajahmundry District for Fasli, 1252-53.
 - 16. Proceedings of the Board of Revenue, 3-4-1844.

trict Collectors of Ganjam, Vizagapatam, Masulipatam and the Collector of Sea Customs at Madras to make detailed enquiries into the subject. In 1844, Sir Henry Montgomery, who was appointed to enquire into the causes of economic depression in the Northen circars, wrote in his report: "The present price of paddy will not be exceeded so long as the unrestrained import of Arakan grain is permitted, for no sooner does the price of home produce begin to rise to a standard remunerating the landholders than the market is flushed with this foreign rice and home-grown grain is a drug. The evil to this is annually increasing and demands speedy correction by the imposition of suitable restrictions to this importation."¹⁷ During the 10 years between 1833-34 and 1843-44, the total value of paddy and rice imported into Madras Presidency from Arakan was Rs. 1.08.14.248 of which Rs. 62,43,540 was the share of the six ports north of Madras, and Rs. 45,70,708 the share of Madras.¹⁸

The Arakan trade in rice just at this time received a fillip from another source. The Supreme Government at Calcutta passed the Act VI of 1844 with the object of abolishing the sayer or the transit duties that were hampering internal trade and of bringing the customs tariff at Madras in a line with the other ports of India. But this measure far from removing the inter-portal duty within Madras Presidency had the effect of raising it so as to conform to the All-India customs tariff; and therefore still kept off grain from districts like Tanjore and Canara which could come mainly by sea, as inland communication was in a parlous condition. This inter-portal duty imposed by the new Act was not

^{17.} Montgomery Report, (Mss) 28-5-1844.

^{18.} Madras Government consultations, 16-2-1846.

^{19.} Notification of the Government of India, 16-3-1844.

only inequitable, being a uniform rate on rice and paddy, it also amounted to 10 to 15 per cent ad valorem on rice and 20 to 30 per cent on paddy and acted as "a tax heavy enough for protection" to the foreign interests.²⁰ Further, although the said act authorised the levy of a higher duty on foreign goods or goods brought in foreign bottoms,²¹ its provisions were inapplicable to imports from Arakan as Arakan was then under Bengal Government and therefore was a British province and "not strictly foreign."

The question of giving the home-grown grain some protection with a view to relieve the distress of the peasants thus received an added force. But the Government was against it.²² They held that prices in the home market were not materially influenced by imports, "as foreign grain to any extent has been imported hitherto only when prices were high."²³ Further, they believed that the inferior quality of Arakan rice as an article of food would always act as a limitation on its consumption on a large scale The most weighty consideration, however, was that such a restriction by cutting off the supplies of an essential article of food in times of famine, would, they feared, aggravate its horrors. Although more than one Collector suggested that at such times the prohibitive duties might be relaxed,²⁴ the Government preferred to watch the working of the Act VI of

^{20.} From the Collector of Ganjam to the Board of Revenue, 21—8—1845.

^{21.} Sections 16 and 17.

^{22.} Madras Government Consultations, 2-2-1846.

^{23.} Madras Government Consultations, 16-2-1846.

^{24.} From the Collector of Rajahmundry to the Board of Revenue, 11—12—1845. In Consultations 26—12—1845; from the Collector of Vizagapatam to the Board of Revenue, 29—11—1845, In Consultation, 8—12—1845.

1844 for one or two years more. In 1848, the continued downward trend of agricultural prices at home convinced them of the necessity to take some action inspite of all doctrinaire opposition to Protection. Hence the Act VII of 1848 was passed, which made the imports of grain from Arakan liable to a protective duty. But this did not have the intended effect, on account of evasions. Vessels taking salt to Chittagong after unloading at that port obtained port clearances in anticipation of goods to be shipped at some of the adjoining ports and then with great facility ran into any one of the ports of Arakan and took a complement of rice cargo. With the document for port clearance obtained at Chittagong they entered the Madras port free of duty.²⁵ Thus on account of irregularities at the Customs Office at Chittagong, Arakan rice evaded the duty imposed by the Act of 1848 and flooded the Madras market "greatly to the prejudice of the Madras grower."26 The Madras Government addressed the Government of Bengal on the subject. requesting the latter to correct the irregularities. But the Act itself did not remain on the Statute book for long. In 1858-59, the preferences and discriminations based on the old colonial system were done away with and the whole tariff underwent complete revision. The necessities of the Mutiny again raised the tariff wall, but all these measures were of little avail when Burma was annexed to the Indian Empire. Although subsequent growth of population and development of communications and irrigation works improved the lot of the Madras ryot, the price for his produce

^{25.} From the Board of Revenue to the Government of Madras, 20-4-1851.

^{26.} From the Board of Revenue to the Government of Madras, 5-5-1851.

was determined by the prices prevailing in Burma.²⁷ The export duty on rice levied in later days undoubtedly had the effect of worsening the position of Madras in relation to Burma. The free import of Burmese rice in Madras had disastrous effects during the recent depression. But the phenomenon is a century old.

27. P. J. Thomas: Recent Trends in the Price of Rice in Madras (Paper to the Indian Rice Committee).

THE ROLE OF A UNIVERSITY

$\mathbf{B}\mathbf{y}$

A. S. Panchapakesa Ayyar, M.A., I.C.S., Bar-at-Law, F.R.S.L., District Judge, North Arcot.

A university differs from a high school, secondary school, elementary school, guild school, and other such institutions engaged in the same mission of education, in that it caters, or ought to cater, to the cream of a nation's intelligentsia, including therein of course, the leaders in every form of art, and not merely people who think. Naturally, five striking things will be found in it.

The first will be the nature of its alumni. These will be carefully selected in an ideal university, only those fit to profit by university education being taken, and all those fit to profit being somenow gathered together. In the university of Nalanda, for instance, there was a preliminary test of ability, corresponding to the responsions in Oxford, in which it has been left on record, by Yuan Chwang, that 70 or 80 per cent would fail. There will, of course, be no outcry regarding the 'slaughter of the innocents,' as, in a wellconstituted society, all will agree that those innocent of knowledge should be refused admission, at the outset, instead of being admitted and slaughtered, after a good deal of waste of time, money and energy. Since the be to collect the very best talents in the nation, even those who cannot afford to pay, but are eminently suitable for university education, will be sent up by local committees

to undergo the kind of education, whether in arts or in science or in fine arts or applied science, they are suited for. In an ancient Indian University, the problem was simple, as every student, rich or poor, had to beg for his food, as the daily routine. It is obvious that no modern country can afford to allow its geniuses and men of talents to run to waste. Of course, everybody will have a right to be admitted to a school and there should even be compulsory education up to the school final standard, for both boys and girls in a combined literary and vocational fashion. Universities alone will cater only to select and suitable persons.

The second distinguishing feature will lie in the asking and anwering of profound questions. Here, too, Yuan Chwang remarks that, in Nalanda, they engaged in discussions from morning till night, the old and the young mutually helping one another, and tutors unable to answer questions being obliged to hide themselves, for shame. Naturally, the conscript classes, common in some Indian Universities, will disappear, and Upanishadic classes, of free discussions between tutors and pupils, will take their place. It follows that a professor cannot have a herd of students, and that the maximum he would be allowed to attend to would be only 10 to 12, so that individual attention and personal discussion would be easy.

Thirdly, teachers and students will live together in the hostels, and have a kind of family relationship, as in ancient India, students attending on the teacher and he on them, mutual nursing in time of sickness being one of the incidents. Thus, they will grow to understand and love one another, and the relationship will cease to be one of routine, as is too often the case now. Perfect equality and a love of freedom and independence will be the hallmark of students and professors alike. Of course, several hygie-

nic, moral and religious precepts would also be thus taught, besides good manners, and the ancient Indian ideal of getting three-fourths of one's education (viz., one-fourth from the teacher, one-fourth from the fellow students, and one-fourth from oneself, the remaining one-fourth having already been supposed to have been given by the parents at home) will be realised.

Fourthly, there will be a periodical and careful weeding out of the unfits and misfits among the students, admitted by error, and of the unfits and misfits among the professors, appointed by error. As Kautilya remarks, a student or teacher without the requisite equipment or discipline is no good. Discipline is of two kinds, artificial and natural, and the study of arts or sciences can bring maximum profit only to those who are possessed of such mental faculties as obedience, hearing, grasping, retentive memory, discrimination, inference, and deliberation. A pupil not possesing such faculties will not only not profit by university education, but will also diminish the profit derived by the rest, like one rotten tooth or fruit spoiling the healthy teeth or fruits. As Kautilya remarks again, natural discipline alone will count vitally, artificial discipline, that is, discipline by punishment, sufficing only to correct acquired errors, something like imported cases of plague being curable by superficial methods, like fumigation, exposure to sun, etc., endemic cases not being curable in those ways. Just as unfit students should be periodically weeded out, by notices to quit, which would be no disqualification whatever, by itself, for civic or other employment, professors and lecturers who are found, in practice, to be useless for teaching. should also be given notices to quit, from time to time, unless they are found fit for research work, in which case, they should be put on that work. Even the best of truths come to nought, when taught by incompetent teachers, just as the best of seeds will come to nought if sown at the wrong season by a person ignorant of cultivation.

The fifth feature is that a university education aims not so much at making a man capable of earning a living, which very necessary job will be taken on by the high schools, but at producing first-rate scholars and men and women of culture devoid of prejudice of caste, class, colour, creed or country; people who welcome knowledge from whatever quarter it is got; who have no false values either regarding themselves or about things around them; and who are valuable members of society and servants of humanity, ready to place their knowledge, experience, reason, wealth and strength at the dispersal of their fellow-beings, and to help the poor, the ignorant, the oppressed, the wicked, the degraded and the depressed, to get out of their miserable state, and thus leave the world a shade better than they found it. They would not swear either by matter or by spirit, and would be so harmoniously developed in body, mind and soul, that, while regarding this life as a field of action and sacrifice, they will not accept either the extreme view of one school that life in this world is a myth, and, so, we need not make any effort to improve it, or the extreme view of another school that death is the end of everything and that we should concentrate merely on eating, drinking and making merry or other selfish activity as long as we live.

If we survey the Universities of India to-day from this point of view, we may be disposed to cry out with Bernier: "Is it possible to establish in India model academies and colleges properly endowed? Where shall we seek for founders, or, should they be found, where are the scholars? Where are the benefices, employments, offices of trust and dignity

that require ability and science, and are calculated to excite the impulses and hopes of young students, which are likely to be given to the products of these academies and colleges?" In a nation like ours, overrun with a cry for communal representation in every benefice, employment, office of trust and dignity requiring ability and science, where the best, even though absolutely free from communal prejudice, caste superiority complex, racial arrogance etc, are forced to await their communal turn, and allowed to rust till then, it is obvious that the last difficulty mentioned by Bernier is a colorsal, and almost insuperable, one. Alas, for knowledge, as Karna exclaims in Karna Bhara of Bhasa, mere lapse of time is enough to make it not only useless, but out of date and pernicious, and while the best man. classified communally in spite of himself, is waiting for his turn, he may not remain the best when his turn comes, and may, indeed, be among the worst by then.

At present, in many universities all over the world, more attention is paid to the material side, and less to the spiritual side. Most research is for destructive purposes, like the discovery of deadly weapons against present and future enemies, than for constructive purposes. And national or racial arrogance is tacitly encouraged, even books on history and science being vitiated by this virulent germ. Nor is the education imparted by the professors of our modern universities always of the broadest variety or imbued with a desire to expound Truth in its thousand facets. Indeed, sometimes, it reminds one of the education imparted by Aurangazeb's old tutor.

The emperor Aurangazeb had an old tutor, Mulla Shah. Hearing that his pupil had become the emperor, the old Mulla rushed to see him, expecting huge rewards and appointments. Aurangazeb refused to see him for 3 months.

Finally, he was so pestered by the Mulla that he saw him. but only to tell him the following home truths: —"Pray, what is your pleasure with me, Mullaji? Do you pretend that I ought to exalt you to the first honours of the State? Let us examine your title to any mark of distinction. I do not deny that you would possess such title if you had filled my young mind with suitable instruction. Show me a well-educated youth, and I will say that it is doubtful who has the stronger claim to his gratitude, his father or his teacher. But, what was the knowledge that I derived under your tuition? You taught me that the whole of Frankistan (Europe) was no more than some inconsiderable island of which the most powerful monarch was formerly the King of Portugal, then he of Holland and, afterwards, the king of England. With regard to the other sovereigns of Frankistan, such as the king of France and him of Andalusia, you told me that they resembled our petty rajahs, and that the potentates of Hindustan eclipsed the glory of all other kings, that they alone were Humayuns, Akbars, Jehangirs, or Shah Jahans, the happy, the great, the conquerors of the world and the Kings of the world,* and that Persia, Uzbek, Kashgar, Tartary. Cathay, Pegu, Siam and China trembled at the names of the kings of the Indies Admirable Geographer! Deeply-read historian! Was it not incumbent upon my preceptor to make me acquainted with the distinguishing features of every nation on earth, its resources and strength, its mode of warfare, its manners, religion, form of government and wherein its interests principally consist, and, by a regular course of historical reading, to render me familiar with the origin of states, their progress and decline, the events, incidents or wars owing to which such great changes and

^{*}These are the meanings of the names of the sovereigns.

mighty revolutions have been effected? Far from having imparted to me a profound and comprehensive knowledge of the history of mankind, scarcely did I learn from you the names of my ancestors, the renowned founders of this You kept me in total ignorance of their empire. lives, of the events which preceded and the extraordinary talents that enabled them to achieve their extensive acquisitions. A familiarity with the language of the surrounding nations is necessary in a king, but you insisted on teaching me to read and write Arabic, doubtless conceiving that you placed me in an everlasting obligation for sacrificing so large a portion of the time to the study of a language wherein no one can hope to become proficient without 10 or 12 years of close application. Forgetting how many important subjects ought to be embraced in the education of the prince, you acted as if it were chiefly necessary that he should possess a great skill in grammar and such knowledge as helongs to a Doctor of Law, and thus did you waste precious hours of my youth in the dry, unprofitable, and never-ending task of learning mere words. Were you not aware that it is during the period of studenthood that the memory is so retentive that the mind receives a thousand wise precepts, and is easily furnished with such valuable instruction as will elevate it with lofty conceptions and render the individual capable of glorious deeds? Can we read our prayers or acquire knowledge of the law and the science only through the medium of Arabic? May not our devotions be as acceptable, and solid information communicated as easily in our mother tongue? You gave my father, Shah Jahan, to understand that you instructed me in philosophy, and indeed, I have perfect remembrance of your having, during several years, harassed my brain with idle and foolish propositions, the solution of which yields no satisfaction to the mind, propositions which seldom enter into the business of life; extravagant reveries conceived with great labour, and forgotten as soon as conceived; their only effect is to fatigue and ruin the intellect, and to render the man head strong, intolerant and insufferable. Oh, yes, you caused me to devote the most valuable years of my life to your favourite hypotheses and systems, and, when I left you, I could boast of no greater knowledge in the sciences than the use of many absurd, obsolete, and uncouth terms calculated to discourage, confuse, confound and appal a youth of the most virile understanding; terms invented to cover the vanity and ignorance of pretenders to philosophy; of men, who, like yourself, would impose the belief that they transcend others of their situation in wisdom, and that their dark and ambiguous jargon conceals many profound mysteries known only to themselves. If you had taught me that philosophy which adapts the mind to reason, and will not suffer it to rest satisfied with anything short of the most solid arguments; if you had inculcated lessons which elevate the soul and fortify it against the assaults of fortune, tending to produce that enviable equanimity which neither insolently elated by prosperity nor basely depressed by adversity; if you had made me acquainted with the nature of men; accustomed me always to refer to first principles, and given me a sublime and adequate conception of the universe and of the order and regular motion of its parts; if such, I say, had been the nature of the philosophy imbibed under your tuition, I should be more indebted to you than Alexander was to Aristotle, and should consider it my duty to bestow a very different reward on you than Aristotle received from that prince. Answer me, sycophant, ought you not to have instructed me on one point at least, so essential to be known by a king, viz., on the reciprocal duties between

a sovereign and his subjects? Ought you not also to have foreseen that I might, at some future period, be compelled to contend with my brothers, sword in hand, for the crown and for my very existence, such as, you must well know, has been the fate of the children of almost every King of Hindustan. Did you ever instruct me in the art of war, how to beseige a town, or draw up an army in battle array? Happy for me that I consulted wiser heads than thine on these subjects! Go. Withdraw to thy village. Henceforth, let no person know either who thou art or what has become of thee."

How to avoid such useless and pernicious teaching? First of all, incompetent teachers, like this Mullah, should never be appointed as professors, and, it appointed by error, should be weeded out, as unfits and misfits at the very earliest opportunity. Secondly, proper text-books, in the language of the pupils, carefully selected by well-known scholars of repute, should be prescribed in all subjects. Thirdly, regimentation in education should be avoided, and the aim of education should be clearly laid down as the development of human personality and culture, instead of providing for future "hands" in factories, "bayonets" in war, and what not. Fourthly, there must be periodic exchange of professors between universities in the same country and in different countries. And lastly, there must be an international board of world-famous scholars to periodically inspect, through some of its members, and report on the workings of all universities every five years, persistently bad or useless universities being liable to be closed down on such reports.

THE NĀGĀNANDA HERO IN MODERN TIMES

By

P. Pänchapagesasastri, Siromani, M.O.L.

Of the several famous plays in Samskṛt, King Śrī Haṛsa's Nāgānanda stands unique; for it presents a blend of the principles of the two great religions of India, namely, Hinduism and Buddhism and presents a hero, Jīmūtavāhana by name, whose dominant characteristic is a matter of dispute between two schools of Rasa. Ānandavardhana finds him a Śānta hero. Dhanika would have him a Dayāvīra.

Rules of Samskrt dramaturgy require that Love or Heroism should be the dominant Rasa in a drama. In this play neither is prominent; nor are they clean forgotten. Singāra is fully developed in the first three acts. Jīmūtavāhana is not desirous of conquest. He spurns material wealth and worldly pleasures. Noble deed of benevolence and selfless acts of charity stend and artist are his ideals and these two virtues form the cardinal tenets of Buddhism as well as Hinduism.

Śṛṅgāra and Vīra not being the main Rasa, what then is the Rasa of the play one has to enquire. The Ānandavardhana school claims Śānta to be the chief Rasa but Dhanika claims Jīmūtavāhana a Dayāvīra.

In this paper an attempt is made to show how the two views may be easily reconciled.

A resume of the story at this point will be helpful. Jīmūtavāhana, a Vidyādhara prince, banishes himself from

his kingdom and spends his life in the forest in the service of his aged parents. In a Gaurī temple there he meets Malayavatī, a Siddha princess. Love at first sight, separation and reunion with consent of parents occupy the next acts of the play. Mitrāvasu, the brother-in-law of the hero, butts in during the honey moon with the news of the invasion of Jīmūtavāhana's kingdom by Matanga, his foe. The loss is welcome to the hero. He dissuades Mitrāvasu from marching an army against his enemy.

One day, strolling on the beach, the hero sees a serpent, named Sankhacuda, on his way to satisfy the appetite of Garuda. Moved with pity the hero offers himself; but the serpent would not permit the substitution. But fortune favours the hero. Śankhacūda steps aside to worship Siva preliminary to sacrificing himself to Garuda and Jīmūtavāhana steps in quickly, dons the red garments and is therefore taken up by Garuda for his victim. On his return Śankhacūda finds Jīmūtavāhana gone and begins a search with the help of the blood streak on the road while on the way Jīmūtavāhana's family join him in his search. They trace him only to find him all but dead. Sankhacūḍa tells Garuda the story of the substitution. Immediately Garuda repents his cruelty and promises to abstain from killing serpents thenceforward. The Goddess Gaurī hears the piteous moan of Malayavatī and helps Jīmūtavāhana back to life. Garuda for his part, succeeds in getting Indra to bring back to life the serpents he had eaten. With this general rebirth, the prince becomes the king of the Vidyādharas.

Now for the reconciliation of the two views. Ānandavardhana defines $S\bar{a}nta$ as the "bliss arising from the control of desires." By knowing the Truth or by Tattvajñāna (i.e.

the transitory nature of all life) the seeker after the Truth controls desires. He is moved by compassion for others. His frame of mind then is that of a \hat{Santa} and therefore he is prepared to sacrifice his transitory life for the good of others.

This Sānta is prominently present throughout the play. The play opens with a reference to Jimūtavāhana's doings to keep his people contented and happy. He feels he has done all he should and proposes to go to the forest to render service to his parents. He crowns his deeds of charity with the giving away of the Kalpaka tree and renounces his kingship to do his duty by his parents in spite of advice to stay on. When his brother-in-law gives him the bad news that his foe was in occupation of his land he is most unconcerned. He has no foes other than his passions. The brother-in-law offers to go upon the foe but Jimūtavāhana answers that he pities Matanga, for he has been conquered by his passion for wealth and adds he is more to be pitied than punished. The brother-in-law receives this advice in derision and is admonished by a reference to the Sun who, even while in the act of setting, is the object of praise by many because He expects no return for His services from the several objects He enlightens and His life-long endeavour is doing good to others.

The hero sacrifices his person to save a serpent. Here again he does so because he knows life is transient. A soldier dying in battle is no hero; for he sacrifices himself in hope either to get victory and become more famous or to get to a better Loka. Even Sānkhacūda offering his life to Garuda is no hero; for he does so in fear of the royal command. If he hesitates to permit Jīmūtavāhana to step into his place, it is because, as he himself says, he wants to

safeguard the honour of his family. Without a knowledge of the Truth none can be a hero. Jīmūtavāhana has nothing but contempt for Vāsuki with two thousand tongues, for, not even one of the tongues was useful to make him say that he would sacrifice himself first before agreeing to an arrangement for the death of his subjects. He ascribed this failure on the part of Vāsuki to love for his own filthy and perishable body. Verily did Sankhacūḍa admire the conduct of the hero opposed as it was to that of great sages like Viśvāmitra.

Jīmūtavāhana offers to be the prey for Garuda in place of Sankhacūda. When he is away for a minute he dons the red robes and offers himself to Garuda. Garuda gulps him little by little. Jīmūtavāhana enjoys as more and more bits of his flesh are taken by Garuda. No pain results; but great joy is felt by the hero. His countenance beams with gratitude to the devouring Garuda, the benefactor. Garuda marvels to see the beam in the eye of his victim and stops eating further. But Jīmūtavāhana eggs him on to eat the remaining flesh and drink the effusing blood. Then Sankhacūda appears. This disturbs the hero for he is afraid that he might not succeed in sacrificing his entire body. His mother who felt that his beauty was being mutilated he answers there can be no beauty in what is called a 'body' as a 'body', according to him, consists of nothing but fat, bones, flesh and blood.

In each one of these points Jīmūtavāhana shows he has mastered the Truth and he is realising his Self. The hero is not content with his own knowing the Truth and acting thereon. But he would try to convert others who come in contact with him to the realisation of the Truth. On this basis he got Garuḍa out of the darkness of Ignor-

ance in which he was. The hero thus shows himself a true $S\bar{a}nta$ in having realised the Truth and having renounced first the desire for wealth, then kingship and later sacrificing his body. Here is $S\bar{a}ntarasa$ in its perfection.

Others argue that, though the hero renounced his and sacrificed his life he cannot kingdom called true Śānta. A true Śānta, according to would seek solitude for purposes of meditation with a view to final freedom from birth. But Jimūtavāhana does not like the solitude of the forest and rejects it as it does not afford him an opportunity to serve and help his fellow creatures. He is mad for a life spent in duty to parents and social service. Again, a true Śānta, though he would like to do good to others, would never persist long in any course. But Jīmūtavāhana persists in doing good to others from first to last. He insists on saving Śańkhacūda even against his wish. He argues with him and seeks every means to do him service. He takes advantage of Sankhacūda's temporary absence and steps into the slaughter-slab in his place. When Śańkhacūda comes back Jimūtavāhana feels his noble purpose was about to be defeated. He prays for thousands of births in preference to final emancipation so that he may do social service.

Again a true Śānta cannot be a lover. But the hero falls in love with Malayavatī and his Śṛṅgāra with her is fully developed in both its aspects (Vipralambha and Sambhoga) in the first three acts of the play. Lastly if Jīmūtavāhana had been a true Śānta he should have ended his life and attained Mokṣa. He should not have been restored to life and reinstalled as king with Malayavatī as his queen.

Therefore Jīmūtavāhana is rather a Dayāvīra (i.e. a cosmopolitan philanthropist keen on doing good to others)

and not a true Śānta. Vīrarusa is of many kinds. In all types of Vīrarasa "enthusiasm" is a common feature. If heroes like Rāma in the Mahāvīracarita who are keen on conquest are called Yuddhavīras, Jīmūtavāhana who is persistent in doing good to others may be called a Dayāvīra.

The case is thus one of Santa versus Dayavīra in the Nāgānanda. But the two views may be easily reconciled. Seen from the view point of the Mahāyāna school of Buddhism this Dayāvīra is Śānta itself. King Śrī Harṣa, the author of the play, lived when Hinduism and Buddhism had learnt to accommodate each other in the same land and Harsa himself in the latter part of his life is said to have had a leaning towards Buddhism. So in this play, the author, with a view to illustrating the main doctrines of Buddhism परोपकार — selected a character reputed in अहिंसा and legend for his benevolence and generosity as the hero of the play and portrayed him as Bodhisattva himself. So in this Buddhist play the hero's characteristic is Sama according to the Mahāyānist view.

According to Mahāyānists, emancipation is achieved by what they call प्रज्ञापारमिता or Discriminative Knowledge gets to be strong by what they call and this प्रज्ञापारमिता दानपारमिता (i.e. "acts of compassion and दयापारमिता and benevolence"). A true Mahāyānist having attained the would not desire Emancipation for himself. He प्रज्ञापारमिता would like to have it only after the whole universe gets it. According to the Mahāyānists, Buddha himself has not yet attained Emancipation as the universe has not yet got it. Moved by unbounded compassion to his fellow creatures, a Mahāyānist is keen on deeds of charity and benevolence to others for they are only an expansion of his Self.

Viewed in this light, Jīmūtavāhana may be called a true Santa not only because he has attained the प्रज्ञापारमिता (i.e. he has realised the 'transcientness' or the 'voidness' of the universe) but also because of his great anxiety to find out opportunities for social service. His obstinate persistence to work for universal good and his longing for newer and newer births are more easily explained. A Mahāyānist is per force led by his own logic to court a long series of births in order to help the universe to Emancipation. Jīmūtavāhana's perpetual advice to Garuda who devoured him is based mainly on this Truth. He knew that Garuda's sacrifice of his life in the absence of प्रज्ञापारमिता Knowledge would not help him to Emancipation. As a true Mahāyānist he was anxious that Garuda should live well, reform himself, use his kingly influence on his subjects and help himself and them to attain True Knowledge.

The objection to the hero's wedded life may not be valid. The objection to wedded life is that its distractions may hinder Tattvajñāna. But there are shining instances like the great Janaka who realised Tattvajñāna even as a householder and a king with all the wealth of a great king. Jīmūtavāhana, endowed with a very strong feeling of renunciation from birth, enjoyed married felicity in perfect detachment. When Mitrāvasu's father told him that he had chosen Jīmūtavāhana as his son-in-law did not Mitrāvāsu say that he was glad because the bridegroom was every way noble; but sad because he was likely to abandon his wife immediately he got an opportunity to do a philanthropic deed? True, Jīmūtavāhana was very much attracted by Malayavati; but even within ten days of the wedding he abandoned her as he had a noble chance of saving Sankhacūda by sacrificing his life. Did he not feel that his wedding with Malayavatī was useful to him and that it helped

him to two red garments in which he became immediately acceptable to Garuḍa? In this case Śṛṅgāra subserved Śānta and ennobled it. Again he felt that the joy caused by the touch of the slaughter-slab was superior to the joys of wedded life. Who can hold that in Jīmūtavāhana's case wedded life was an obstruction to Tattvajñāna? Though he was newly married, he rose above worldly temptations and became, in Garuḍa's words Bodhisattva himself. Perhaps this was the truth the poet sought to emphasise when he introduced the scene of Jīmūtavāhana's married life which he could have avoided with perfect ease.

The objection that if Jimūtavāhana were a true Śānta he ought to have ended his life and attained Nirvāṇa has already been answered. He was not a Hinayanist who would care only for his own Emancipation. He was a Mahāvānist and so he prayed for many births to help others also to attain Tattvajñāna. So he was, at the end of the play, restored to life. As in this case so in many other works Indian writers do portray the tragic element in life but the last scene does not end in death; for according to them, death in one life is but the beginning of another in a series of lives the soul has to pass through before attaining Emancipation. Further, the poet shows here a truth that good actions always bring a reward greater than expected. Jīmūtavāhana sought to save one serpent by sacrificing his life; but he actually saved his own life and also generations of serpents of the past and of the future. Jimūtavāhana, the Dayāvīra, is thus not different from Jīmūtavāhana, the Śānta.

Further, even without bringing in the Buddhist way of thinking, critics like \bar{A} nandavardhana establish that $J\bar{i}m\bar{u}tav\bar{a}$ hana, in spite of his great enthusiasm, is only a $S\bar{a}nta$ and not a $V\bar{i}ra$. They contend that the essence of $S\bar{a}nta$ is complete negation of 'egoism' while the $V\bar{i}ra$ is

essentially 'egoistic.' Jīmūtavāhana's enthusiasm is of a peculiar kind. It is free from "egoism" because all his actions are utterly selfless. His enthusiasm free from 'egoism' is not opposed to $S\bar{a}nta$ but it nourishes it. Jīmūtavāhana is thus a $S\bar{a}nta$ par excellence.

Lastly opinions that $S\bar{a}nta$ cannot be a Rasa in poetry and drama have no place as many works like the $N\bar{a}g\bar{a}nanda$ have $S\bar{a}nta$ not only as one of the Rasas delineated in them but have it as the dominant Rasa. From the $N\bar{a}g\bar{a}nanda$ and similar works critics have established that like $Sr\bar{n}g\bar{a}ra$ and $V\bar{i}ra$ $S\bar{a}nta$ also may be the main Rasa in poetry and drama.

Jīmūtavāhana's is a life consecrated to service for others. As if to remind us of old world heroes the illustrious Founder of this University, Rajah Sir Annamalai Chettiar, has striven hard and saved well in order to serve nobly. He has been an example of service and sacrifice. If Jimūtavāhana gave away the Kalpaka tree, the Rajah has planted a tree of Knowledge and given South India a temple of Learning so that all irrespective of caste or creed might enjoy the fruits thereof. In the service of his country and his countrymen the Rajah has established choultries to feed the poor, provided filtered water to ward off disease, built hospitals to restore those stricken with disease to health and happiness and renovated and structed temples to lift them to God. Above all he has helped generations of people to all kinds of education so that the thirsty might drink deep of the fountain of Learning, cast off mental as well as physical dirt and reach heaven by scaling the heights of Knowledge. May he live long to promote the ancient culture of this land and continue to support in an ever increasing measure all Samskrt studies in this part of the country!

THE ANCIENT INDIAN THEATRE

By

Prof. K. R. Pisharoti, M.A., Maharaja's College, Ernakulam

Every genuine drama is intended to be staged and the true dramatist conveys his appeal through a double medium. the ear and the eye. He is a complete master so far as the former is concerned; but as regards the latter, the nature and equipment of the theatre and its varied accessories no less than the artistic skill of the artistes constitute very serious limitations on the work of the dramatist. every true artist will certainly take stock of the varied visual aids he can command, when he conceives and perfects his work of art. The appreciation of a drama cannot have any pretence to completeness, unless and until one knows also the nature of the stage and its equipment where the drama is to be presented. This aspect of the study of the drama it seems, has been completely forgotten and with it we have also forgotten our theatrical traditions, even if we had any. The question therefore deserves to be asked: had we any such tradition? The answer to this question is definitely in the affirmative. On the theoritical side we have in the first place the valuable work of Bharata, called the Nātva-śāstra and in the second place the numerous stage directions, found scattered about in the extant Samskrit plays, though unfortunately no serious attention seems to have been paid to them in interpreting dramas. On the practical side we have the peculiar mode of acting Samskrit dramas which is current in Kerala even to-day. These necessarily

would show that we perfected a stage technique long long ago, though we did not care to keep up the stage tradition living, except in Kerala. The subject, then, is very important and it has a practical bearing in that it helps us to appreciate our national heritage of dramatic literature better: but it is at the same time not an easy one to deal with. A full and detailed exposition of the subject requires an intensive study of the following: (i) The Nātya Śāstra of Bharata; (ii) the chapters dealing with Nāṭyagrhas, in the various Śilpa-śāstras; (iii) a study of the existing Nātyagrhas, particularly those in Kerala figuring as an adjunct to our temples (iv) the reconstruction of the stage and the theatre from the stage directions available in the older dramas; and (v) the study of the acting, as it now obtains in Kerala. It is proposed to make an attempt in the following pages to set forth the information that we get from the Nātya $\hat{S}\bar{a}stra$, so far as our theatres are concerned.

According to Bharata, the theatre may be rectangular square or triangular in shape. could easily We conceive of the former two types of theatres. the third type. The triangular theatre must have been very rare and that is also the impression that we get from Bharata. Following the usual practice of Samskrit writers, these three types are again classified under three heads of Uttama, Madhyama and Adhama, as well as Jyestha, Kanistha and Avara. of the theatre may vary widely: there are two units of measurement laid down for Natyagrha, namely Hasta and Danda. and of these Hasta itself varies from 24 to 32 Angulas. This will give us some idea of the practical differences in the size It is laid down that a theatre may have one of a theatre. of the following measurements: 108 or 64 or 32 Hastas, the breadth being given only for the rectangular theatre which is half the length. For the square theatre there is no need to give the breadth and from the description of the triangular theatre it appears to be an equilateral triangle. From the measurements given it would be seen that the rectangular theatre may be of three dimensions: 108 by 54 or 64 by 32 or 32 by 16 Hastas or Dandas; the square theatre, 108 or 64 or 32 Dandas or Hastas per side. The biggest theatre will thus be the rectangular theatre of 108 Dandas, and the smallest one will be the triangular theatre of 32 Hastas. Hence from the point of view of size we have six kinds of theatres and from the point of shape, three types or in all we may have eighteen types of theatres. Of these eighteen kinds, Bharata lays down for human beings the rectangular theatre of the medium size, that is the theatre having the measurements 64 by 32 Hastas, or the square or triangular theatre of 32 cubits, while the theatre of major measurements is reserved for Gods. And in fixing up the medium theatre for human beings, he is guided by practical considerations. For, when the theatre is very long, the effect of intonation will be lost upon the audience at the extremity, which, indeed, play a great part in representa-Similarly, when the theatre is very small, words, when spoken loudly, would be reverberated and echoed. As regards facial expression also there is defect: when the theatre is very big, it is not properly caught by the audience, and, when too small, the effect is lost. Thus Bharata's preference of the medium type of theatre is perfectly normal and natural.

All the parts of the theatre with which we are now familiar are found mentioned by Bharata also: we have the green-room, the stage and the auditorium, the size and disposition of which change according as the shape and size of the theatre differ.

The green-room is located in the hindermost extremity of the theatre, as it is even now; and it is separated from the auditorium by the stage, and has no direct entrance from In the rectangular theatre of 64 Hastas, the green room will be 16 by 32 Haslas according to one school, or 8 by 32 according to another school (See Pl. I Fig. i). That is to say the breadth of stage will be 1/8 or 1/4 of the whole length of the theatre. The latter seems the more authentic of the two opinions, for the Samskrit dramas have generally a large number of characters taking part therein and secondly only a few characters are on the stage at the same time; and, therefore, unless the green room is pretty big, it must necessarily be very crowded. Again, the practical convention, obtaining in these parts, indicates the same thing. For, the green room itself has to be partitioned into two, one for ladies and the other for men; otherwise they have to be promiscuous in the same place, which is not consistent with our sense of decency. From the green room there are to be two entrances into stage, and between the two entrances there will be the wooden panel, composed of two horizontal wooden pieces and four vertical ones, as Abhinavaguptapadacarya would have it. This worden panelling is called by the term Ṣad-dāruka (See Pl. I Fig. ii) and in actual practice it corresponds to the pre-scenium of the Grecian The Ṣaḍ-dāruka forms the ornamental background against which the actors act. In the square theatre (see Pl. II Fig. i) the green-room has one-fourth the length of the theatre as its breadth: that is, its size will be 8 by 32 Hastas. and as before it occupies the hinder-most part of the structure. As before here also, there is the Sad-dāruka. The shape of the green room in the triangular theatre does not appear to be clear. Apparently it must be of the shape either of a triangle or a trapeze (See Pl. II Fig. iii). If it

be the former, its size will be 16 Hastas a side and will be an equilateral triangle. From the point of view of the reference to doorways, it seems that the stage must be located right in the centre of the triangle as in the case of the square theatre, thereby creating an irregular rectangular green room behind at the base of the triangle

The stage is the most important part of the theatre, and about this fuller details are available, thought it cannot be said to be complete or very clear. The stage is found divided into two sections, the front called the Rāngapīṭha and the back, called Ranga-śīrṣa.

The Rangaśīrsa in the rectangular theatre lies between the green room and the Rangapitha (See Plate I, Fig. i). Regarding its size, there are two opinions. According to one commentator, it will be as big as the Rangapitha itself and the two together will be as big as the green room. According to the other school, it will be half the size of the green room and these two together will be as big as the Rangapītha. Thus based upon this difference, the Rāngaśīrsa of a rectangular theatre will be either 8 by 32 or 16 by 32 Hastas. Whatever its size, the Rangaśīrṣa stands between the green-room and the Rangapitha, and it serves as the ante-chamber for the green room and the back room for the stage. Though the actual function of the Rangasirsa is not very clear, it appears evidently to be the space where the actors in costume can await their time of appearance and from where the actors could be prompted. words, this part other of the stage area space for taking the actors some rest, prevents them from being exposed to the audience on their arrival on the stage and serves to beautify the stage, for it is flanked in front by the elevated Rangapitha with its wings.

called *Mattavarini*, (See Plate I, Fig. i). Hence one may assume that one has to descend from the *Rangapītha* to the *Rangašīrsa*, which latter seems to be on a level with the green-room. From the point of view of the audience, the most prominent feature of the *Rangašīrsa* will be the *Saddāruka* which stands right in the centre and from the point of view of the actors it serves as the tiring room.

The Rangasīrsa in the rectangular theatre (See Plate II, Fig. i) differs from the same in the square theatre, in that while it is co-extensive with the green room and the stage in the former both in front and back, it is co-extensive with the green room only in the latter but not with stage, if we may accept the interpretation of the commentator. supports our interpretation to some extent regarding the purpose of the same. It may be pointed out that the Rangaśīrsa becomes a useless thing in the square theatre, unless its purpose is as we have made it out. Here also it is said there must be the Sad-dāruka. It will be noticed that, while in the rectangular theatre the Rangaśirsa is co-extensive with the green room, it is not so in the square theatre (See Plate II Fig. i). Here arises an interesting question as to how to screen off the sides beyond the stage proper. If it is not screened off, this could be of no use to the actors concerned, as we have explained it, and if it is to be screened, how is it to be done and with what material? Are we to locate here the Mattavārini which in the rectangular theatre is coextensive with the front line of the stage, but here with the back line? It may possibly be that the numerous pillars mentioned in the course of Bharata's text might serve as the Mattavārinī: but presumably the subject is not clear. Coming to the triangular theatre, we have no information regarding the Rangaśīrsa. As a matter of fact, Bharata does not speak of any Rāngaśīrṣa for this kind of theatre.

From what has been said it will be clear that the Ranga consists of two portions, the front portion, called the Rangapītha and the back portion called the Rangaśīrṣa which, so far as we now could make out, serves the purpose of a tiring room for the actors in costume.

The Rangapītha or the stage proper is the most important part of the theatre. At the back of the stage the audience sees the ornamented Sad-dāruka and on either side the Mattavarinis the ceiling of the stage being held up by beautifully wrought pillars, adorned with all the skill of the sculptor and the painter. We also learn from the description that the stage is on a level different from that of the green room on the one side and the auditorium on the other. The Rangapitha in the rectangular theatre (See Plate I, Fig. i) stands between the Rangaśīrsa and the auditorium and extends throughout the whole breadth of the structure, thirty-two Hastas long and eight Hastas broad. At either extremity of the same are the Mattavārinis, (See Plate I Fig. i) which are adorned with four pillars, eight Hastas square and one and a half Hastas high. To the height of the Mattavārini must the stage be raised; and this raised space, or the front of the stage, is to be constructed of wood or burnt brick and adorned with dovecots, altars with rail patterns, floral designs etc: in other words, this forms an ornamented foot-board. It will thus be clear that the Rangapitha will be one and half cubits higher than the floor level. The question now is this: whether the Rangaśirsa is to have the same level with the Rangapītha or with the green room. We have already explained that it ought to be on a level with the green-room, so that it might be used also as a tiring room for the actors. There are of course differences in views on this subject, noticed by the commentator, but unfortunately the text is not clear. However the text

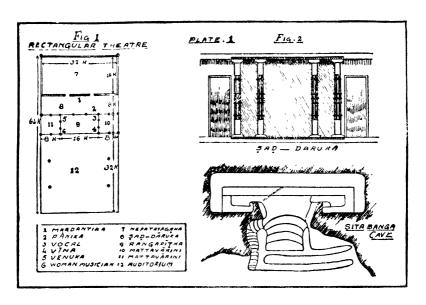
makes one thing very clear: that the actors' part of the theatre must be of two levels and that the green-room must be of a lower level: it is described as *Śailaguhākāra*.

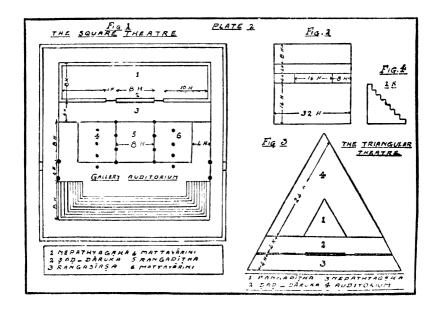
The disposition of the stage in the square theatre (See Plate II, Fig. i) is strikingly different. The stage is composed of the four square bits in the centre when the whole floor area of the theatre is divided into sixty-four equal parts; and when this marked out we get a plot of ground, twelve by thirty-two Hastas. Behind this and in continuation thereof there is the Rangaśirsa (See Plate II, Fig. i) measuring four by thirty-two Hastas and still behind is the green-room adorned with the Sad-dāruka and measuring eight by thirty two Hustas. It will be seen thus that the Rangapitha stands right in the centre in the square theatre, (See Plate II, Fig. ii). As regards the triangular theatre, the directions are still meagre. The text lays down that the Rangapītha must be located in the centre and that it must also be a triangle (See Plate II, Fig. iii). This suggests that the green room of the shape of a trapeze will be located at the base of the triangle and from the inner side of the trapeze will jut out the stage of the shape of a triangle. As before, here also there might be two entrances into the green room, the interspace being flanked by the usual Ṣaḍ-dāruka, corresponding to the praescenium of the Grecian theatre.

The auditorium takes half of the rectangular theatre, (See Plate I; Fig. i.) the other half being utilised for the green room and the stage. Reference is also found made to the different levels in this half, the stage being one and half Hastas higher than the green room. Here, then, the green room and the auditorium will be on the same level, the stage being on a higher level. The elevated nature of the stage thus enables the audience to see clearly what happens on

the stage. In the square theatre on the other hand, the area set apart for the audience is slightly over a third of the whole structure, the area of the same being twelve Hastas by thirty-two, (See Plate II, Fig. i). To make up for the lesser seating space in this kind of theatre, provision is made for gallery arrangement, (See Plate II, Fig. i) each tier rising by a cubit and a half, (See Plate II, Fig. iv) the gallery itself being built of bricks and wood. This is a particularly interesting feature, in as much as here have we the earliest reference to a galleried seating arrangement. In the triangular theatre, there is no specific mention of the auditorium. There is certainly no gallery arrangement for seating; but it is worth while to mention the fact that unless some such arrangement is available the seating capacity will be very little. Now comparing the rectangular theatre and the square theatre as regards the disposition of the stage and the auditorium, it will be found that while the stage is higher than the auditorium in the former, the auditorium is higher than the stage in the latter. This, then, is a unique point of difference.

The stage, as has been described, has clearly four divisions: the green room, the back stage, the front stage, and the auditorium. We have also seen that there are two specific features on the stage namely the Ṣaḍ-dāruka and the Mattavāriṇis, the former figuring as the ornamental background for the stage and the latter figuring as the ornate sides of the stage. We also learn from the text that the stage has its own roof and the stage area is adorned by a number of graceful pillars. There is, however, given no direction which would show that the auditorium had any roofing or that it had any enclosure. One is inclined to think that there was none: otherwise there would certainly have been some reference to side doors from the green room. In these





features our theatre bears some resemblances to the Grecian and Roman theatres, which we may now notice briefly.

The arrangement of the Athenian stage is very simple: it consisted of a round orchestra, and a low rectangular skene with a projecting Paraskenia and a low platform stage. Between the skene and the auditorium lies what is termed the Prosckenium which is understood as the back wall of the stage in front of which the actors act or as pillars in front of the stage between the actors and the audience or as the stage. In these respects this agrees with our theatre, particularly in our having the Mattavārini and the Ṣaḍ-dāruka. In early days the skene alone formed the stage, the auditorium not forming part of the theatre: the two were distinct parts. But, when the Romans borrowed the same, the two were connected together, the paradoi—the passage —being closed by what is termed Vomitoria. In the Roman theatre we find a roof over the stage which became an ornamental one when the whole structure including the auditorium came to have roof. In this respect also this agrees with our theatre. Thus when we compare our theatres with the Grecian and Roman theatres, there is something which is common; and the resemblances become striking when it is further pointed out that we do not know the exact function of the Mattavarmi and the practical basis of the differentiation between the Rangaśīrsa and the Rāngapītha.

Bharata's text also emphasises that the structure must be adorned with sculptures and paintings. Ample provision is found made for music, both instrumental and vocal, (see Plate I, Fig. i, for the seating of musicians). The structure must again be accoustically perfect and must have excellent ventilation. It will thus be seen that when Bharata lays down the nature of the ancient Hindu stage, he does so with a practical eye into the details—an aspect that is proved by the discovery of a pre-Christian cave at Ramgarh, (See Plate I, Fig. iii) carrying an inscription which has been rendered by Prof. Jules Block thus:

Poets venerable by nature kindle the hearts, who.... At the spring festival of the vernal full moon, When frolics and music abound, people Thus(?) tie around their neck garlands Thick with jasmine flowers.

-(ARA. 1903-4).

SOME HINDU ECONOMIC IDEAS AND PRACTICES

By

V. G. RAMAKRISHNA AIYAR, M.A.

We often claim as original many ideas and practices which were known to our ancestors. Those who study the economic thought in the nations of antiquity are often struck by its 'modernism'. A sympathetic study of the ideas and practices of the ancients is necessary for intelligent and sound progress. The religious books of ancient India—the Ramayana, the Mahabharata, the Smritis, the Puranas and specific treatises like the Arthasastra of Kautilya are replete with information bearing on many a modern economic controversy. Economic thought of ancient India, in terms of modern economic science is badly needed as a service to human knowledge in general and as a step towards a proper understanding of the indigenous problems. It will be of course, unscientific to try to reconstruct a full fledged economic science out of material supplied by past experience and ideas. But nobody can deny that for the study of specific economic problems like collectivism, currency regulation, Social Policy and Finance, we may refer with advantage to past experience.

The Hindus have always taken a less materialistic view of life which has, therefore, retarded their industrial progress to a large extent. Moral or religious codes have usually played a greater part in shaping their thought and outloook. Oriental economic ideas, it is interesting to note, were developed at a time when the civilization of the West was in its infancy. The economic concepts of the Hindus

are the ideas of an ancient civilization based upon an agricultural economy and they were drawn from the writings of priestly law-givers. The lives of the people were largely determined by these writings, and these writings have come down to us exerting a powerful influence even on our time. A study of Hindu economic ideas and practices is therefore useful.

The central idea of Hindu Government and education was the fulfilment of the law. Such a situation meant a minute regulation of everyday life and it follows that the material for this study is mostly drawn from rules of conduct or laws. A study of those regulations of the Hindus which are significant as indicating the character of their economic thought shows that the following subjects were the most important. Agriculture, occupations, interest and usury, labour and wages, property taxation, inheritance, weights and measures, adulteration, monopoly and the poor.

Among the most striking regulations of the Brahmanic law were those concerning interest and usury. Money lending by the higher castes was closely restricted. Brahmins and Kshatriyas could not lend at interest. In case of loans made without security, the following terms were legal; for gold, double value, i.e., 100 per cent; for grain treble the original price; anything sold by weight might be sold at eight times the original value. Various kinds of interest payments were distinguished; there might be compound, periodical stipulated, corporal and use of pledge—corporal interest being that paid in labour, use of pledge referring to cases in which the lender made use of some security like cows, for example. Thus the fact is apparent that among the ancient Hindus, interest was closely connected with some concept of a just price. At the death of the king or the jubilee

year interest should cease, a tabula rasa when debtor and creditor should be equalised.

Among the ancient Hindus, there were careful regulations against false weights and measures and against adultration. Provisions against speculation and monopoly were even more stringent. Competitive markets were practically impossible, and so we see even to this day that there is no one price in the Oriental shop, and so these minute regulations about weights and measures were necessary lest the consumers should be exploited. According to the Institutes of Vishnu, the King was to keep the whole produce of mines. By Brahmanic law, a hired workman who abandoned his work before the term had expired, was to pay the whole amount of stipulated wages to his employer and a fine to the king. On the other hand, if an employer dismissed a workman whom he had hired before the expiration of the term agreed upon, he must pay the full amount of the wages stipulated and a fine to the king, unless the workman was to blame.

As regards the economic significance of the caste system, it was, as an Italian economist puts it, 'division of labour gone to seed.' It stood for rigidity of society and for permanent inquality among social classes—an attitude which means a point of view in economic thought. The four castes had specific functions in society. That some elasticity was possible in the social system of the ancient Hindus appears from the fact that in the time of distress each caste might follow the occupation of one below it. In general, however, the most severe separateness was to be maintained. In the earlier stages of national development, the principles underlying the structure of the Greeks and the Romans were the same as those of the Hindus. In India,

however the distinctions became rigid and stereotyped; in Europe society was soon able to throw off the shackles.

The growth of the caste system, the organisation of rural India on the basis of village communities, and the fatalistic outlook on life of the Indian cultivator reflect the strong influence of Geographical environment, past and present.

The insistence of the Holy Books of Hinduism upon the sacredness of the cow can be traced back to the time when the economic feature of the early Aryan pastoralists of India's savannahs was bound up with the preservation of their cattle. Although with the rise of cultivation, this early necessity has long since vanished, so tenacious is tradition that the whole creed of cow worship with its elaborate ritual and legend still persists. A religion which once aimed at promoting the survival and betterment of its devotees, now under changed conditions hinders the material progress of India's agriculturists. Owing to religious scruples concerning breeding, control and slaughtering, stock-raising on modern scientific lines for milk, beef or even for hides and tallow is almost unpractised. In India there are more than twice the number of cattle in the U.S.A. and yet except for erratic and meagre supplies of milk, they are of no use as a source of food. As draught animals, their value has been depreciated by centuries of uncontrolled breeding and lack of care and attention, and when dead either through age or disease, their hides are small and inferior in quality. Allowed to wander at will, they are a nuisance to the farmer and his crops.

Economics, Geography and Religion are much more closely connected than we usually suppose. In India where

everything is done on a superlative scale, religion has for thousands of years dominated man's mind so completely and absolutely that it has become an integral part of everything the Hindu says and thinks and does and eats. In other countries, too, religion has often interfered with the normal development of life but not to the extent we find in India. The priestly caste of the Brahmans was the first to live upon the products of other people's labour, whether bestowed as voluntary gifts or sacrifices to the gods. His was a perilous life. For the reverence and sanctity accorded to him as representative of the god was easily upset. In a very real sense, his income was 'payment by results'. He must deliver the goods, produce rain or fair weather when needed, for the crops, stop pestilences and other troubles. Something could be done by skilled prophecy, e.g., he could 'produce' rain when rain was coming and perform effective rites of fertilisation in spring time. But any calamitous failure was taken to prove incapacity or malice. Even to-day the ordinary Hindu agriculturist recognises his dependence upon the natural resources and the fecundity of Nature for his successful livelihood. It is not too much to say that this fecundity of nature was the first consideration in the great religions of the world, whether of Ra. Zeus, Ammon, Mithra or some other sun-god or some female deity of fertility, such as cybele or ceres or Shakti. All the chief Hindu festivals relate to points in the sun's progress during the year and this sun-worship cannot be detached from the worshipful regard to the generative processes in the vegetable and animal world. Earth has been regarded by the Hindu as the mother-element, and the idea of the mother-goddess has prevailed in India from ancient The modern current slogan 'Bharat Matha Ki Jai' points to the persistence of this belief.

The account given in the Golden Bough of the worship of Adonis indicates how far the older magic had survived in the early religions of the East. The "Gardens of Adonis" were "baskets or pots filled with earth, in which wheat, barley, lettuces, fennel and various kinds of flowers were sown and tended for eight days chiefly or exclusively by women. Fostered by the sun's heat, the plants shot up rapidly, but having no root, they withered as rapidly away and at the end of eight days were carried out with the images of the dead Adonis and flung with them into the sea or into springs. The rapid growth of the wheat and barley in the gardens of Adonis was intended to make the corn shoot up; and the throwing of the gardens and the images into the water was a charm to secure a due supply of fertilising rain. In India this custom still survives and is observed methodically all over South India soon after the harvests. we find a reciprocity of services between God and Mammon religion and industry. The gods gave protection against enemies in war, promoted vegetation and animal fertility and gave 'luck' in agriculture. In return the people got treasures for their temples, food and other necessaries and comforts for themselves. In India a large increasing part of such treasures as did not rust or decay came to be deposited in the temples. The wealth and leisure thus secured to the temples and the priestly castes stimulated among them the beginnings of culture in literature, science and the fine arts of music, sculpture, architecture, painting, dancing, etc. thus laying the foundations of many of the higher crafts and industries that spread in secular life.

ĀTREYA RĀMĀNUJA: HIS LIFE AND WORKS

By

Prof. R. Ramanujachari, M.A.

Atreya Rāmānuja, popularly known as Appullār, was the spiritual guru and the maternal uncle of Vedānta Deśika, the renowned scholar and outstanding exponent of Viśiṣṭādvaita Philosophy. In the line of Śrī Vaiṣṇava Ācāryas commencing from Bhagavān Rāmānuja, the author of Śrī Bhāṣya, Ātreya Rāmānuja was the fifth. His predecessors in that office were his own father, grand-father and great-grand-father. Thus Ātreya Rāmānuja and his lineal ancestors enjoyed the proud privilege of being the accredited exponents of Viśiṣṭādvaitic thought to the four successive generations that followed Bhagavad Rāmānuja. Some of the most eminent thinkers and men of letters of later days were also scions of this illustrious stock. The celebrated Gopāla Deśika of Kumbakonam and the poet Venkaṭādhvarin may be cited as examples.

The materials for writing the biography of Ātreya Rāmānuja are disappointingly scanty. It is, however, learnt on reliable authority that he was born at Conjivaram in the year 1220 A.D. (in the month of citra of the year Vikrama). At the close of each chapter of Nyāyakuliśa he refers to himself as the son of Padmanābhārya. His father must also have been known as Rangarāja, as is evident from the traditional account.¹

1. Caitrārdrāsambhavam kāñcyām Rangarājagurossutam | Supratiṣṭhāmśamātreyam Rāmānujagurumbhaje ||

His great-grand-father, Praṇatārtiharācārya (also called Kadāmbi Accān), a nephew of the celebrated Bhāṣyakāra was his most trusted and loyal disciple. He was an able exponent of Viśiṣṭādvaita Philosophy. So great were Praṇatārtiharācārya's scholarship and his powers of argument and exposition that he was named *Vedāntodayana* (the Udayana of Vedāntic thought).

Along with Sudarśana Bhaṭṭa, whose Śruta-Prakāśikā (a commentary on the Śrī-Bhāṣya), Tātparya-Dīpikā (a gloss on the Vēdārtha-Samgraha), and Śuka-Pakṣīya are remarkble for their learning and polemic ability, Ātreya Rāmānuja studied the Śrī-Bhāṣya and other vedāntic works under the eminent Vātsya-Varadaguru. From his own father, Ātreya Rāmānuja learnt the inner significance of the mantras held sacred by the Vaiṣṇavites. He was a bold and original thinker. In recognition of his extraordinary skill in dialectics, the title 'Vādi--Hamsāmbuvāha' was conferred upon him.

Tradition, as preserved by his descendants, speaks of him as the author of three books, of which Nyāyakuliśa alone is now available, the others having been irretrievably lost. It is a matter for great regret that even the names of these books have been forgotten. In his Tātparya-Candrikā, the famous gloss on Rāmānuja's Gītābhāṣya, Vedānta Deśika quotes in the course of his comments on verses 14 and 15 chapter XVIII, Ācārya Vādihamsāmbuvāha as saying:

Vaisamye sati karmaṇāmaviṣamaḥ kim nāma kuryāt Kimvodāratayā dadīta Varado vāñchanti cet durgatim. kṛṭī.

Evidently this is a quotation from one of the missing books. Judging from this fragment, one is led to believe that the work from which this has been extracted was, in all probability, a religious lyric, (stotra) in praise of the Lord.

Vādi-hamsāmbuvāha was fortunate in his pupil. His nephew and disciple, Vedānta Deśika again and again speaks of his own extraordinary good luck in having had such a preceptor and expresses his deep sense of gratitude for what his guru had done for him. In one place, he says that his guru trained him as the trainer of birds would train a parrot.2 In another context in the same work, he owns that in his writings he is merely giving outward expression to what his Ācārya had inscribed in his mind.3 Even when due allowance is made for Vedānta Deśika's self-effacing modesty, the fact still remains that he owes much to Ätreya Rāmānuja. Readers of Rahasyatraya-Sāra will remember that its author refers to a great knack that his uncle and guru had of expressing highly abstract thoughts in an exceedingly simple manner with the aid of homely similes that enabled the listener to go straight to the heart of the matter. To explain the mystic significance of the pranava he would ask his pupils to remember the oftquoted verse from the Rāmāyaņa:

"Agrataḥ prayayau Rāmassitā madhye sumadhyamā | Pṛṣṭhatastu dhanuṣpāṇiḥ Laksmanonujagāma ha"||

First went forth Rāma; Sītā with her delicate waist, in the middle; Lakṣmaṇa, bow in hand, brought up the rear.

- 2. இப்படி...... இழும் மேலுமுள்ள பாசுரங்களெல்லாம் வேதார்தோ தயா ஸம்பிரதாயமான மடப்பள்ளி வார்த்தையை ஆசார்யன் பக்கலிலே தாங்கேட்டருளினபடியே கிடாம்பியப்புள்ளார் அடி யேலீனக் கிளியைப் பழக்குவிக்குமாப் போலே பழக்குவிக்க அவர் திருவுள்ளத்திலிரக்கமடியாகப் பெருமாள் தெளியப் பிரகாசிப் பித்து மறவாமற் காத்துப் பிழையறப் பேசுவித்த பாசுரங்கள். (Rahasyatrayasara),
- 3. வெள்ளேப் பரிமுகர் தேசிகராய் விரகாலடியோ முள்ளத்தெழுதிய தோஃயிலிட்டனம்.—(Rahasyatrayasara)

The three letters of the *Pranava*, respectively stand for the Lord, His consort, and the individual soul.⁴

The author of the $Git\bar{a}$ declares that he who shrinks away from God thinking that He, by His infinite perfections, is far above finite souls is the worst of men $(nar\bar{a}dhama)$. Atreya Rāmānuja was likewise convinced that we should approach the Lord in the spirit of the gopis of old who entertained no doubts about His accessibility. He used to express his agreement with the passage in the Gita which condemns faint heartedness on the part of the devotee.

Nyāyakuliśa (the Thunder-Bolt of Reason) is a standard work on Viśiṣṭādvaita Vedānta. It is frequently referred to, and cited as an authority, by Vedānta Deśika in his Nyāya-Siddhāñjana, Nyāya-Pariśuddhi, Tattva-muktā-kalāṇa and other works. It is written in stiff prose interspersed with kārikas used whenever sententious summaries or pointed exposition are needed. In each of the thirteen sections into which the book is divided, the author tackles a definite philosophical problem and establishes the standpoint of Viśiṣtādvaita after refuting the views of the rival philosophical systems. It is highly polemical and shows the author's mastery over the entire range of Indian thought. A perfect master of the art of controversy, his logic is invincible, a veritable thunderbolt (kuliśa) to his philo-

—(Rahasyatrayasara)

^{5.} இவ்விடத்தில் ஸர்வேச்வரனுடைய பரத்வமாத்திரத்தை அறிக் தகலுகையாலே நராதமனென்று பேர்பெற்ற பிறக்துகெட்டானிற் காட்டில் இடைச்சிகளேப் போலே விவேகமில்ஃயெயாகிலும் வெளவப்யத்தை யறிக்து அக்கலனுடை யொருவளே கணுகு மவனே பரமாஸ்திக னென்றப் புள்ளாரருளிச் செய்யும் பாசுரம்.

sophical opponents. A brief indication of the topics discussed may be given.

From the point of view of Vedānta the most important problem is perhaps the question whether the Upaniṣadic texts which speak of what exists as a fact $(siddh\bar{a}rtha)$, Brahman or Ātman, are authoritative or not. If, as the Prābhākara school of Mīmāmsā maintains, something to be done $(k\bar{a}rya)$ is the ultimate significance of every proposition, the Veda must have such a thing $(k\bar{a}rya)$ or an action for its final import. The entire body of the Upaniṣadic texts dealing with Brahmam or Ātmam would lose all validity, and the ground would be cut from under the feet of the Vedāntin. Hence, the first chapter addresses itself to the task of refuting the Prābhākara view.

To prove that the Vedas are in their very nature (svatah) valid, the author, in the manner of the Bhātṭa Mīmāmsakas, seeks to establish in the second chapter the doctrine known as svatah-prāmānya-vāda (the self validity of knowledge). In demonstrating this position the main controversy is with the Naiyāyikas who are advocates of paratah-prāmānya-vāda (the theory of validity from outside).

In the third chapter, Rāmānuja repudiates the Prābhā-kāra and the Advaitic accounts of error, known respectively as akhyāti and anirvacanīya-khyāti, and maintains yathār-tha-khyāti, a doctrine peculiar to the Viśiṣṭādvaitin. According to this view all judgments reveal only what exists (sat).

Vādi-hamsambuvāha establishes, in the fourth chapter, the thesis that $j\tilde{n}\bar{a}na$ is self-luminous ($svayam-prak\bar{a}sa$). The ground is prepared for this doctrine by the refutation of the views of Kumarila Bhaṭṭa, Murāri Miśra and the Naiyāyikas in regard to this matter. $J\tilde{n}\bar{a}na$ is like the lamp which dis-

pels darkness and reveals objects and does not require for its own manifestation another lamp. By its conjunction with objects, $j\tilde{n}\bar{a}na$ reveals objects; but, in regard to its own manifestation, $j\tilde{n}\bar{a}na$ does not depend upon another $j\tilde{n}\bar{a}na$.

Unless the view that God is inferred (ānumānika) is abandoned the scriptures would lose their validity. If god is known through inference, then, on the well-known principle that the śāstras are valid only with regard to matters lying beyond the scope of the other pramāṇas (Aprāpte śāstram arthavat), in respect of God, the scriptures would become futile. To establish their prime usefulness Ātreya Rāmānuja refutes the Nyāya theory that God is ānumānika.

Next he shows that the soul is an entity different from the body, senses, mind (manas), vital breath $(pr\bar{a}na)$ and intellect (buddhi), that it is distinct from every other soul, that it is an agent $(kart\bar{a})$, that it is a knower and the object of self-consciousness (aham-pratyaya). As a preliminary to the establishment of this thesis, he subjects the Cārvāka and the Advaitic conceptions of the soul to a rigorous examination.

For a proper understanding of Vedantic passages, such as, "Satyam, Jñānam anantam Brahma," it is essential that the true nature of sāmānādhikaraṇya (the grammatical coordination of words in a sentence) must be grasped at the very outset. Consequently the author takes up for consideration the definition of sāmānādhikaraṇya furnished by the grammarians, examines the interpretations put on it by the Bhedābhedavādins and Advaitins, and in the end establishes what he considers the correct interpretation. Sāmānādhikaraṇya is defined by the grammarians as follows:—
Words having different pravṛtti-nimitta (reasons of application or significations), but referring to an identical object

(i.e. words having connotational difference and denotational identity) may be said to stand in the relation of $s\bar{a}m\bar{a}n\bar{a}dhi-karanya$. Different words may stand in the relation of coordination, if there are different reasons for their application and if they refer to one and the same object. The first part of this definition aims at showing that there can be no coordination between synonyms like 'pot' and 'jar'; because the reason for applying the term 'pot' to an object is not different from that prompting the use of the word 'jar'. The second part serves to point out that there can be no co-ordination between words referring to wholly different objects, e.g., pot and cloth. It rules out such meaningless co-ordination as 'the pot is cloth.'

The problem of causality which has evoked very keen controversy is next tackled. The Nyāya-vaiśeṣika view of causality known as asat-kārya-vāda (the view that the effect has no existence before it is brought into being, but orginates afresh) is subjected to a penetrating criticism and sat-kārya-vāda (the doctrine that the effect pre-exists in its cause in a latent form) established. The upanisadic text declares that by knowing one thing everything becomes known; and in illustration of this it cites the case of clay and says that by understanding it all objects made out of clay, such as jars and cups, are understood. Clearly, the idea conveyed here is that when the material cause is known its manifold effects are thereby known. And this would be impossible if the cause and the effect were totally different.

The question of the precise nature of $s\bar{a}m\bar{a}nya$ (universal) has long been the battleground of philosophers. The $Ny\bar{a}ya$ - $Vai\acute{s}e$ sika elevates $j\bar{a}ti$ to the rank of a distinct principle. On this view, $j\bar{a}ti$ is the generic property perceptible equally in all the particulars (vyakti) of a class. It is eternal, unitary, ubiquitous $(anek\bar{a}nugatam)$ and

directly apprehended. It is not a mere product of the imagination as the Buddhists contend, but a factor of reality existing out there in the objective world.

The tenth chapter takes up the question whether śakti (potentiality) should be recognised as a distinct category or not, and answers it in the affirmative after refuting the Nyāya-vaiśeṣika arguments in favour of the opposite view. In this regard, the Vśiṣṭādvaitin is at one with the Bhāṭṭas and the Prābhākaras.

In this chapter the Nyāya conception of abhāva (non-existence, negation) is criticised and the view that abhāva is not distinct from, but is merely a variety of, bhāva (existence, affirmation) is upheld. Prāghabhāva (anterior non-existence) is only another name for the unending series of previous states; dhvamśābhāva (subsequent nonexistence) is the name for the unending series of subsequent states. If this theory is borne in mind, the scriptural passage "In the beginning this was non-existent (asat)" could be assigned its primary meaning.

The most prominent among the doctrines that differentiate Viśiṣṭādvaita Vedānta from all other schools of Vedāntic thought is its view that the entire cosmos comprising souls and matter constitutes the body (śarīra) of Brahman. For understanding the exact significance of this description of the cosmos it is necessary to know what precisely is meant by the term śarīra. In the Śrī Bhāṣya the body is defined as follows:—

"That substance which, in respect of the activities in which it can engage, is capable of being completely controlled and supported by, and which exists for the sake of, a conscious entity is the body of that conscious entity."

The twelfth chapter discusses the question whether this is a single definition or a collection of three definitions and concludes that it is a single definition; for each of the three definitions into which it is resolved is found to be defective in some respect or other. Ādheyatva, vidheyatva and śeṣatva are all essential elements in the definition of the body. That this is so would follow from a careful study of the celebrated Antaryāmi Brāhmaṇa where the doctrine that the universe is the body of God is clearly formulated.

Is it at all possible for the soul whose intrinsic nature is to be self-luminous ($svaprak\bar{a}\acute{s}a$) to be entangled in samsāra? What is the conception of ultimate value? These are the two questions Vādi-hamsāmbuvāha raises in the last chapter.

THE MODERN SUPERSTITION OF RACE

By

DEWAN BAHADUR K. S. RAMASWAMI SASTRI, B.A., B.L.

'Race' is a magical word which means anything or nothing and which Hitler alone, as the supreme head of the much-advertised supreme race in the world, pretends to understand. The so-called Nordic race has got long skulls but so have many Negroes and the Ainos and the apes. For a long time past we have had too much emphasis on the physical basis of the concept of race. Generally the character of the hair and the skin, and the shape of the nose and the head and stature are emphasised. The famous nasal index is the relation of the breadth of the nose to its length. Long heads are called dolichocephalic and round heads are called brachycephalic. We are also told about the blood test and are informed that there are four different kinds of blood when tested by serums. The properties of these four kinds of blood are entirely unknown. Further serologists say that these tests do not enable us to determine race. Nor do we gain much from the colour gradations viz., white, yellow, brown, and black. Further, there is no really white, or yellow, or brown or black human being. G. B. Shaw says with his usual cynical wit that a really white man would be a horrible sight. What we have is a gradation of tint.

This does not mean that there are no broad divergences of physical features. But they form a slippery basis for classification. The mystical belief in race based on such a physical basis alone is sure to lead us into error and unproved and unprofitable assertions. We have every reason to stand aghast at the pompous and current myth of the Nordic race. But what shall we say of the endeavour of English thinkers to find the roots of British greatness in a Germanic past, though to-day Britain and Germany are the bitterest foes engaged in a deadly death-grapple? Saxonism became almost a religion and the phrase "Anglo-Saxon" received unparalleled and enormous propaganda. Even the battle of Hastings was rechristened as the battle of Senlac. Bishop Stubbs said in his lectures on Early English History "It is to Ancient Germany that we must look for the earliest traces of our forefathers, for the best part of almost all of us is originally German, though we call ourselves Britons, the name has only a geographical significance. The blood that is in our veins comes from German ancestors." What is the good of identity of blood when there is nonidentity of heart?

The search for racial traits has gone on not only in the realm of politics but also in the realm of art. The Germanic races were supposed to have a genius for democracy. And yet Germany herself is under the heels of a Dictator! Taine went so far as to say; "vice and virtue are products like sugar and vitriol." This is surely eccentricity which has gone beyond limits. Once we get into the labyrinth of innate and inborn racial traits, there is no getting out at all. Granting that there are same broad divergences of physical characteristics among the major human groups, what can any one infer therefrom about mental and aesthetic and moral and spiritual characteristics being derived from such physical traits? How can you affirm any relation of cause and effect between them even if you are able to show any degree of co-existence?

The race-enthusiasts have their counter-part in climate-enthusiasts. These pin their faith to latitudes and longitudes and altitudes. They explain, everything in terms of heat and cold. We have, in addition to such race-mystics and climate-mystics, a third brand of mystics—the food-mystics. These are satirised in Samuel Butler's *Hudibras* in the famous lines:

"Was ever Tartar fierce and cruel
Upon the strength of water gruel?
But who can stand his fire and force
When first he rides, then eats his horse?"

In addition to these mystics we have gland-mysticism. The thyroid and other glands seem to have taken the place of the goods of old. We must thus steer clear of all these discordant and dangerous types of selfish and materialistic mysticism. Religious mysticism leads to gentleness and peace and love but these mysticisms, and especially racemysticism, lead to brutality and war and hate.

In fact, theoretically speaking a race may be composed of many nations, and a nation may be composed of many races. The race concept is a museum-concept. It is not a live concept at all. But the nation-concept is a living concept. Sir Arthur Keith says well that several hundred years of a common history and a common way of life have often welded divergent races into one nation. We must get out of the ciutches of a merely materialistic anthropology. We must not try to gauge the contents of brains by measuring the length or the breadth or the circumference of the skull or talking learnedly about diameters of skulls or cephalic indexes. Warring groups of men have often been welded into a culturally homogeneous group by the iron-hand of Time. In such homogeneity

cultural fusion is of greater importance than physical fusion.

The concept of race is thus a mere modern superstition, Yet in its name, thousands of Jews have been massacred or exiled or suppressed in Germany and elsewhere. In its name, the Nordic race is out to "civilise" the world and build universal peace on the basis of universal war! Germany is to-day a dreadful whirlpool of racialism and nationalism and militarism. If one admires the German, he calls him Nordic; if one hates him, he calls him a Hun!

I plead for a recognition and realisation of the mental and moral and spiritual elements as being far more important and vital than the purely physical elements in the concept of race. I plead for the subordination of *Kultur* to *Culture*. I plead for a self-manumission from the tyranny of the absolutist and occult and mystical ideas of race. The cultural pattern is of much greater importance than the physical pattern. Spinoza says well: "In regard to intellect and true virtue, every nation is on a par with the rest and God has not in these respects chosen one people rather than another." Why should we disturb the supposed deceased anthropoid ancestor of *Homo Saniens*? Let us get on with ourselves as we are:

"Act, act in the living present Let the dead Past bury its dead".

I deprecate also the modern tendency to exalt in the name of science the biological fusion of races. Even science declaims against free and unrestrained and promiscuous cross-fertilisation of races. The data in respect of this matter are so uncertain that different scientists draw different and diverse and even contradictory and mutually destructive inferences from the same data. The data themselves are

often so doubtful and unverifiable and unreliable. Even if some of them are clear there are other hidden and unknown factors whose efficacy is unknown. Much more tangible and effective than the fusion of blood is the fusion of cultures. The basic culture, if it is strong, assimilates congruous elements in other cultures with which it comes into contact and is invigorated and strengthened by such contacts.

Let us thus clearly realise that the race-concept must be lifted from a Zoological concept to a cultural concept. The Zoological concept will lead to clashes and conflicts. The cultural concept will lead to contacts and connections. The former leads to such phrases as "the white man's burden", "the yellow peril" etc. But the latter leads to mutual respect and mutual assimilation. It does not create superiority and inferiority complexes as the former has always done and is doing and is sure to do hereafter as well. When very unequal cultures meet there may be a possibility of the domination or supersession of one culture by another. But where fairly equal but diverse cultures meet, there will be no such trends but there is sure to be assimilation and enrichment.

Modern India has come into the clutches of the tentacles of the race-concept. It is supposed by some persons that all the Brahmans in South India are Aryans and that the rest are Dravidians! But taking the tests of hair and skin and stature and nasal index and cephalic index, as propounded by the anthropological experts, many Brahmins will have to be classified as non-brahmins, and many non-brahmins will have to be classified as Brahmins! Dr. Risley says that the original Dravidian inhabitants of India were persons whose "stature was short, complexion very dark, hair curly and nose broad". Most of the South Indian non-brahmins do not correspond to this description. We have got

Dravidian traits in North India and Aryan traits in South India, and we have got Dravidian similarities in Brahmins and Aryan similarities in non-brahmins, if we attach much importance to the anthropological emphasis on physical characteristics. The "Dravidastan" protagonists are not really supported by the experts in the science of anthropology.

I am therefore disposed to attach little importance to the physical patterns in the Indian race-concept and much importance to the mental and moral and spiritual pattern in the concept. Tested by such a test, all the Indian communities belong to one cultural pattern, even though different sections pursue different religions. They pursued only one religion viz., Hinduism, till conversions to other world-religions made headway. But the cultural unity has not really been broken by religious diversity in India. Ahimsa and Bhakti and introspective meditation and deep faith and spirituality are found in the Indians en masse despite the diversities of denominational religion. Mr. Jinnah's reference to two nations has no real basis. It is not religion that is the real basis of nationhood. The real basis is the cultural nexus. Thus the population of India belongs to one race and one nation and one culture, and Indian unity is indivisible and invincible.

THE FUSION OF ARYAN AND DRAVIDIAN ELEMENTS IN MALAYALAM LANGUAGE AND LITERATURE

By

P. Sankaran Nambiyar, M.A., (Hons.).,
Professor of English, Maharajah's College, Ernakulam

The subject of this paper has several facets, of which it is proposed to deal with only one at present.

In Malayalam there exists a peculiar variety of literary dialect, called "manipravālam", the like of which has not yet been met with in any other language in India or elsewhere. Numerous works of superb poetical excellence are extant in that dialect, and the period of its heyday has been reckoned by many scholars as the Golden Age in the history of Malayalam poetry. It is, however, significant that the works so far discovered in that dialect are confined to certain particular literary genres,—their authors being mostly the Brahmins (Namboodiris) of Kerala. Apart from the appreciation of classical poetry in Malayalam, a thoughtful study of the dialect under reference would be of help in understanding the true nature of the fusion of Aryan and Dravidian elements in the language and literature of Kerala.

The name "manipravalam" is familiar to all as connoting an admixture of Sanskrit and Dravidian works in poetic diction. In Malayalam, however, it has a restricted and distinctive sense. Here, for one thing, only such words are counted as Sanskrit as are used in their original grammatical forms—declined and conjugated exactly as in Sanskrit—all

*

Sanskrit words shorn of their Sanskritic terminations being treated just as Malayalam words merely.

A combination of "native" and "loan" words in their original grammatical forms may sound somewhat odd or bizarre in other languages. Imagine, for instance, the opening lines of "Paradise Lost" written in a dialect which is a mixture of English and Classical words inflected exactly as in the respective languages from which they are derived something like this:—

Of hominis disobedience et the fruit
Of that forbidden tree, whose mortal gustus
Introducat mortem into the world

* * * * *

Canta, Heavenly Muse!

But in the high-class "manipravalam" of Kerala, there is absolutely no such discord or clumsmess of enect; and mat is the beauty and wonder of it! Sanskrit words, with their original declensional and conjugational forms intact, are so artistically welded with words of pure Dravidian descent as to yield the effect of "linked sweetness long drawn-out." An authoritative treatise on the subject, entitled "Leelatilakam", which is believed to have been written nearly six centuries ago, sets forth in detail the rules relating to the choice and arrangement of Sanskrit and Dravidian words in poetry. Its authorship is attributed to a Kerala Brahmin (Namboodiri), who was evidently an illustrious scholar in Sanskrit and Dravidian language alike, and possessed an intelligent command of the grammatical and critical apparatus of Sanskrit. In the first section of the book, dealing with the characteristics of "manipravalam", he takes special care to emphasize that the selection and marshalling of Sanskrit and Malayalam words should be guided by considerations of smoothness and euphony. "Manipravalam", if it should justify its name, should present such a pleasing array of Sanskrit and Dravidian words as to be hardly distinguishable from each other. It should indeed be a necklace strung with rubies and corals—the ruby (mani-) being Malayalam, and the coral (pravalam) Sanskrit, according to "Leelatilakam". They merge almost imperceptibly into one another, thanks to their mutual likeness in tone and colour. Such a smooth and easy amalgamation of Aryan and Dravidian elements is the supreme test of standard "manipravalam". Rare or unfamiliar words should be sedulously avoided in both languages, and words of common occurrence in them should be preferred,—the true criterion of success in diction being Rasa (sentiment). It is interesting to note in passing that the best "manipravalam" is that which embodies more of Malayalam and less of Sanskrit words, and is marked by outstanding Rasa. Such, be it remembered, is the dictum laid down by the Brahmin author of "Leelathilakam", and such indeed "manipravalam" actually was in its palmy days. Examples of it are legion in the literature of the centuries immediately preceding and succeeding "Leelathilakam". Gradually, however, the sound precepts of "Leelathilakam" came to be discarded, and "manipravalam" deteriorated into an incongruous medley of harsh-sounding and out-of-the-way words indiscriminately taken from Sanskrit and Dravidian languages, the Sanskrit element predominating over the Dravidian, in flagrant violation of all sense of proportion and harmony. It had been explicitly stated by the author of "Leelathilakam" that the diction in which Malayalam words were comparatively small in number, and rasa was deficient, was positively inferior. Likewise, if either the first half or the second half of a quatrain, or its last line, were to consist exclusively of Sanskrit words, then too, the diction was considered to be definitely inferior. (By the way, the term "manipravalam" was generally applied to verses written in Sanskrit metres those written in Dravidian metres being known as "paattu.").

It is a particularly unique feature of the ancient "manipravalam" of Kerala that it admitted pure managanam words declined and conjugated with Sanskrit terminations, as if they were pure Sanskrit words. This could not have possibly happened in any language in the world! Even the pecuharities of Sanskrit syntax were copied in pure Malayalam. Thus the words for "food" and "sleep' in malayalam (oonu, and urakkam) are seen declined as a compound, Sanskrit Dual Accusative.... "oonurakkau". The verbs, "pokkamchakre", "pinnitethas", seen in an old "Sandesa-kavya" are really Malayalam verbs conjugated like their counterparts in Sanskrit. "Kezhantee" is a Sanskrit Present Participle formed from the Malayalam verb, "kezhuka" (to weep). Sometimes, the qualifying and the qualified words are declined alike as in Sanskrit. Instances of such singularity of behaviour of "native" words in "manipravalam" may be seen scattered about in the older poems, but not in the later ones, as the genius of the Malayalam language began to assert itself more and more in the course of its evolution. At first, no doubt, Sanskrit Grammar superimposed itself on Dravidian; but before long Sanskrit came to be stretched on the Dravidian "Procrustes bed", from which, however, it came out well adapted to the disposition of the Dravidian tongue.

In other words, the Aryan with his cultural superiority was domesticated by the Dravidian, in this land of Parasurama. The history of "manipravalam" is the history of the fusion of the two races, and it shows how the Aryan and the Dravidian took to each other more kindly in Kerala than,

perhaps, in any other province in South India. Here in Kerala, it is abundantly clear from linguistic and literary evidence (let alone, for the present, evidence furnished by other departments of human activity) that the Aryans and the Dravidians endeavoured in right earnest to come together as closely as possible in a spirit of mutual trust and goodwill. It is their mutual adjustments and compromises in this process that are reflected in the development of our "manipravalam."

Mention has already been made of the fact that the authors of most of the "manipravalam" works hitherto known are Brahmins (Namboodiris) who are generally held to be Arvan in descent. There is ample internal proof in their writings to establish that they were profoundly erudite Sanskrit scholars, and that nothing could have been easier for them, if they so desired, than to give expression to their poetic talents through the medium of pure Sanskrit. Equally easy would it have been for them to write exquisite poetical works in pure Malayalam (as, indeed, the author of that most beautiful of all Malayalam poems, "Krishna-Gaatha", did)—the command of pure Malayalam displayed by them in their compositions being even to-day the envy and despair of our poets. Yet they chose to write their best poems neither in pure Sanskrit, nor in pure Malayalam, but in the particular dialect which is a sweet admixture of both. And they interlarded their diction profusely with words in their original Sanskrit grammatical forms, sometimes levelling even pure Dravidian words to such forms. their intention was merely to write for the delectation of members of their own community, it is obvious, they would have more naturally written in Sanskrit, just as the Norman-French authors of England during the twelfth and thirteenth centuries generally wrote in the Norman-French

language, rather than in pure English, the language of the "natives" of the country. Evidently, it was not the object of the Brahmins to write poems meant exclusively or mainly to be read by members of their own community. On the other hand, they were presumably more interested in leading by the hand the other less learned classes on to the fair fields of classical literature. This is the reason, as one may rightly infer from the peculiar character of the composition in "manipravalam," why we notice so many elements of popular fascination in them. Sanskrit vocabulary and grammar, administered in short and sweet doses, would be taken in by the average reader without much effort. He would thus be initiated into the intricacies of Sanskrit Grammar in the course of his joyous poetical studies, almost without his own knowledge. Who can deny that it was precisely what the authors would have rejoiced to see? There is a common notion prevalent among our people that the Brahmins of Kerala were persistently hostile to the Sanskrit education of other communities; and many traditional stories are also current in support of such a notion. But the fact about "manipravalam", sought to be explained in this paper, should not be lost sight of in any discussion of the above notion. We are not talking of Vedic studies, but only of secular Sanskrit education. And it would be worth while to consider in a purely academic spirit how far the Brahmin authors of our "manipravalam" works could be regarded as enemies of popular Sanskritic studies.

There is one fact more to be borne in mind in a survey of "manipravalam". This literary kind has hitherto witnessed the output of no serious epic or dramatic composition, but only of *Champoos*, *Sandesas* and other lovelyrics, and didactic and devotional verses and versesequences galore. *Champoos* are Kavyas written partly in prose and partly in

verse. In the "manipravalam" champoos, however, the place of prose is taken by verses composed in various Dravidian metres! This curious feature cannot reasonably be attributed to the contempt which the Brahmin authors of Champoos felt towards the Dravidian verse-forms, as some critics have alleged, but to their desire to propitiate Malayalee readers by offering them in plenty something which was familiar and dear to them through long usage. To them the so-called prose of champoos would thus be an additional source of attraction. Above all, champoos deal with stories or episodes taken from the Ramayana and the Mahabharata, which were already well known to the people, or with events of topical interest, or with an imaginary story intended merely as a frame-work for academic delineation of the passion of love. In the Sandesas (message-poems) which in technique are modelled exactly on Kalidasa's "Cloud Messenger", the first half is taken up by poetical descriptions of places and scenes of the Kerala country, so familiar to the reader, and the second half by a reminiscential delineation of all aspects of love. 'The lyric poetry in "manipravalam" can, in respect of quantity, quality and variety, easily stand comparison with that of Elizabethan English literature. The heroines in most of the lyric poems in "manipravalam" (including the Sandesas) are non-Brahmins. From all these facts, it would not be wrong to make an inference about the popular character of "manipravalam" works

There is a theory that "manipravalam" is traceable to the comic compositions of the poet Tōlan, meant to be recited by the Clown (Vidooshaka) in Koothu and Kootiyattam, as old as the first century M.E. But in those compositions the obvious aim of the author was to produce comic mirth by incongruous combinations of Sanskrit and Malayalam words,

and by the parody of Sanskrit verses and Sanskrit diction. What a far cry from such buffonery of Tolan to the poetical heights of Champoos like the Ramayana, Bhasha-nyshadha, Bana-yuddha, Kama-dhana, Chellor-nadhodaya, Raja-ratnavaleeya, Koti-viraha, etc. to Sandesas like Unnu-neeli-sandesa, and to the lyric fragments scattered about in "Leela-tilakam" and others being published and yet to be published from old-palm-leaf manuscripts (some of which the author of the present paper has edited and is still engaged in editing). Surely, one cannot help exclaiming when face to face with this fertile field of Malayalam poetry "Here is God's plenty".

The sweetness and harmony of "manipravalam" persisted right down to the period of Thunchath Ezhuthachan (eighth century M.E.) who has been been called the father of modern Malayalam in the sense in which Chaucer has been called the father of Modern English. By his time the tendency had become marked to free Malayalam from its subordination to Sanskrit. "Manipravalam" had been definitely vitiated by indiscriminate thrusting-in of discordant Sanskrit words, and by the callous neglect of the pure Dravidian element. Naturally there followed a reaction in favour of the latter. Thus in modern Malayalam, the Dravidian element has come to its own. Of Sanskrit vocabulary, there is much even to-day in the Malayalam language much more than in other Dravidian languages. But the genius of the Dravidian language has ultimately triumphed in Malavalam too!

Rev. Caldwell is right when he says: —"One of the most marked characteristics of the Malayalam language, as we now find it, is the quantity of Sanskrit it contains. The proportion of Sanskrit words adopted by the Dravidian languages is least

in Tamil, greatest in Malayalam." Likewise, the intermingling of Brahmins and non-Brahmins has been more intimate in Kerala than in the other parts of the Dravidian country, whereof our "manipravalam" is but an index. At the same time, it has to be added, to avoid the possibility of a misunderstanding, that the Dravidian element is the bedrock on which our language and literature have been built up to-day. What Archbishop Trench has said about the respective contributions of Anglo-Saxon and Latin to the making of English is applicable to Malayalam, if we substitute Dravidian for Anglo-Saxon, and Sanskrit for Latin, and read the passage as follows: —"All its joints, its whole articulation, its sinews and its ligaments, the great body of articles, pronouns, conjunctions, prepositions, numerals, auxiliary verbs. all smaller words which serve to knit together and bind the larger into sentences, these, not to speak of the grammatical structure of the language, are exclusively Dravidian. Sanskrit may contribute its tale of bricks, yea, of goodly and polished hewn stones, to the spiritual building, but the mortar, with all that holds and binds these together, and constitutes them into a house, is Dravidian throughout." The same is true of the indigenous strength and importance of our society, however much and in whatever ways Arvan influences may have contributed to its moulding in the course of the centuries of contact between the two great races on this side of the Western Ghats.

VIGNETTES FROM THE HISTORY OF THE CHIDAMBARAM SHRINE

By

Professor C. S. Srinivasachari, M.A.

I. EARLY TRADITIONS.

The great Sabhanayaka Shrine of Chidambaram (par excellence, the Kōil) round which the ancient town has clustered and to which our Annamalai University and settlement bear a strong spiritual filiation, goes back to the earliest days of Saiva and Vaishnava reaction against the dominance of Jainism and Buddhism in the land. According to tradition, the temple was of divine origin, and its nucleus was divinely installed. Its most ancient votaries, Vyāghrapāda (He of the tiger foot) and Patanjali (He of the serpent form) held to be an incarnation of the thousand-headed Ādiśēsha, form the earliest links in the religious traditions of the shrine.

The legendary account of Patanjali is closely connected with the mystic dance of the Lord Siva, which taught a lesson to the proud Rishis of the Táruka forest, puffed up with conceit of Vedic learning (and held by a commentator to be followers of Mīmāmśa), made them alive to the great glory of Siva converted them into His fervent devotees. Vyāghrapāda, the son of a Brahman hermit living on the banks of the Ganges, was advised by his father to go to Tillai, a vast wilderness covered with trees of that name (Excoecaria Agallocha) and find the Parabrahma (Supreme Spirit) in

that sacred spot. He bathed in the Sivaganga tīrtam and worshipped a Lingam established under the shade of a banyan tree by its bank, and thus arose the shrine of the Mūlasthāna, the earliest nucleus of the temple. Vyāghrapāda soon found that he could not climb the lofty trees in the early dawn, to select fresh flowers for his daily worship of the God, prayed to the Lord and got from Him the boon that his feet and hands might become those of a tiger, armed with strong claws and he be furnished with tiger's eyes, so that he might easily climb and see the flowers in the dark of the dawn; he thus became known as 'the tiger-footed and sixeyed'; and a part of the present town came to be known as Tiru-Puliyūr (Sacred Tiger Town); and also Perumbarrapuliyūr.

Some time later, the great Ādisēsha assumed the form of half-man and half-serpent, in order to see once again Siva performing the mystic dance in Tillai, and there met Vyaghrapada. He also made for himself a hermitage nearby and installed a Lingam by a tank, which continue to this day as the Anantīswara Shrine and the Nāgachēri tank, at the west end of the town. Likewise, Vyāghrapāda had installed a Lingam of his own at a little distance towards the south-east of the Mūlasthāna.

The traditions of these two great devotees go back to times earlier than the epoch of the legend of the Pallava King who was cured of leprosy by bathing in the Sivaganga tank and changed his previous name of Simhavarman into Hiranyavarman (the golden-bodied) as a consequence. He repaired and added to the nucleus shrine. This early royal patron of the shrine has been equated with the Pallava ruler, Simhavarman II, (or III) who reigned probably between 550 and 575 A.D.¹ One of the later traditions of the place has

called this king a Chola (Stanza 12 of the Kōyilpurānam). The picturesque story of his being commissioned by Vvāghrapāda to guard Vyāghrapura and his being given the flag of the tiger-crest, is embodied in the Köyilpuranam of Umāpathi Sivāchārya, a Saivite scoliast of the later thirteenth and early fourteenth centuries. He is said to have belonged to the Dikshita community and his samadhi in Korrayangudi (between the Chidambaram railway station and the University campus) can even now been seen. Umāpathi is the author of a good portion of the basic literature of Saiva Siddhanta, viz., the eight works beginning with the Sivaprakāśa; he has also given a graphic account of the life of the great Śēkkilār, the author of the Perivapurāṇam, (Liber Sanctorum) and of the work of Nambi-Āndār Nambi in his two compositions, entitled "Śēkkilār Nāyanār Purāṇam," and "the Tirumurai-kanda-purāṇam." The former of these two deals with an age when the memory of the great Chola rulers, Kulottunga I (acc. 1070), and Kulottunga II (acc. 1133), must have been relatively fresh in Umāpathi's mind. Therefore, his account of Śēkkilār, who was a contemporary of these kings, can be held to be much more historical in its perspective than the other work dealing with Nambi Āndār Nambi, whose age can be fixed at the early eleventh century, if not at the close of the tenth.

Umāpathi became the supreme theologian of the Tamil Siddhanta and is held to have learnt his wisdom from his master, Maraignāna Sambanda, who belonged to a lower

^{1.} Hiranyavarman was a surname of Mahendravarman I as mentioned in an inscription at Conjeevaram—Subject Index to the Annual Reports on South Indian Epigraphy 1887-1936 (1941), p. 27, Col. 1.

caste and was expelled from his own community for having partaken of food with his master. He forms the last of the quartette, known as the Samaya-Kuravar and the Santhāna Āchāryas of the Saiva Siddhanta Darṣana. His Kōilpurānam embodies legends which are in point of time long antecedent to those of the Saiva Nāyanmārs, described by Sēkkilār and Nambi-Āndār Nambi and may be said to constitute a portion of the oldest epoch of South Indian Saiva legends. Ārumuga Nāvalar of Jaffna, a great Tamil scholar and Saiva pietist of the last century, edited the Kōilpurānam and gave his own valuable commentary on the significance of the mystic dance of the Lord. According to one opinion, the comprehension of Patanjali among the earliest devotees of Siva indicates the absorption in the Saiva teaching of the system of Yoga thought of which he was the founder.

II. LATER TRADITIONS.

Most striking among the numerous associations of the 'Great Four' among the Saiva saints, is the legend connecting the temple with Manikkavaçaga's victory over the Buddhists in the great disputation, described in the sixth canto of the Tiruvādavūrar Purānam, which is an amplification of some sections of the Madura Stalapurānam. Therein we read how the great Saint of Vādavūr was summoned from his retreat to confute the aggressive Buddhistic teachers who had come over to Chidambaram with the king of Ceylon at their head. The Chola King urged the saint to vanquish the Buddhistic disputants in an irrecoverable manner. saying that it should be the Saint's care to establish the truth of the Saiva wisdom; and afterwards it would be his royal duty to extirpate the Buddhists. Mānikkavaçaga vindicated the supreme power of Siva "seated as the Teacher in the shade of the beautiful banyan tree, teaching the laws

of right," and as the Dancer in Tillai's beauteous golden half with the girdle of the tiger skin (i.e., human passion) wrapped round him and wearing the serpent necklace (i.e., the guile and malice of mankind) and crushing under his foot the Demon Muyalagan, which is the embodiment of human depravity. This disputation might refer to the last epoch of the struggle of the Saivites with the Buddhists who continued to linger for a number of years in isolated centres in the Tamil country, like Negapatam, and received frequent reinforcements from Ceylon. The legend can be attributed to about the ninth century.

Yet another attractive and heartening legend which has grown round the shrine is that of Nanda, the Ädi-Drāvida saint, who obtained final beatification in front of the Dancing Lord, passing into eternity when in a state of ecstatic devotion. The story of Nanda's piety is a very popular theme; and snatches of songs from the Nandanär Charitra Kirtana of Gopalakrishna Bharati are on everybody's lips in the Tamil country. The kirtana story has deviated in several respects from the version given in the Periyapurāṇam. The inclusion of Nanda among the traditional Sixty-three Saints should be regarded as being supplememary to his inclusion in a decade of Sundaramurthi Nāyanar's Tēvāram, which can be ascribed to the first quarter of the ninth century A.D. The legend is certainly older than that date. Stressing on the great moral value of this legend, one can repeat the words of Sir William Wilson Hunter, when extolling the shrine of Jagannath, that as long as the towers of Chidambaram exist, so long will there be in the land "the perpetual and visible protest of the equality of man before God."

In addition to the great prominence enjoyed by the shrine in the *Tēvāram* hymns, and particularly in the writ-

ings of Mānikkavaçaga whose Tiruvaçagam (Holy Utterance) was said to have been first recited in the temple itself and whose Tiruchchitrambalakkõvai was composed in its honour, one can note the pleasing and intensive association of the shrine with the redaction of the Tamil hymnal literature under the patronage of the Chola monarchs. The whole of the Tēvāram hymns, being the first of the collection of works held to be canonical by the Tamil Saivas, was put together in one book by Nambi Andar Nambi (cir., A.D. 975-1035), an Ādi Saiva Brahman of Tirunāraiyūr. This collection is known as the Mūvar Adangan Murai and was divided into seven books by Nambi. He comprehended the two works of Mānikkavaçagar into an additional eighth book, and a number of Tiruvisaippās by nine different authors and the Tirumandiram of Tirumular as the ninth and tenth books. The Chola king requested Nambi to put together one more book, consisting of miscellaneous poems and including some of his own works. The Pcriyapurāṇam was added, later on, as the twelfth book. Nambi Andar Nambi invented the peculiar metre and music according to which the great songs of this collection have since been sung. With the help of the Chola Abhaya Kulasēkhara Maharajah, he composed, in front of the Kanakasabha, the metre for all these-a divine voice having proclaimed that the knowledge of the metre had been already communicated to a maiden born of the family of the blessed Tirunīlakanta Nāyanār, who was thereupon brought before the shrine and made to give out the songs with appropriate notes and music. The Chola monarch had all these Tirumurai songs with their appropriate pan, engraved on copper plates and then had them formally recited in the orthodox manner in the shrine of God Tyagaraja of Tiruvārūr.

The Periyapurāṇam of Śēkkilar is replete with fanciful and miraculous legends; but it is possible to trace in it the various epochs in the religious history of early Saivism. The poet was angry that the courtiers of the Chola monarch should admire a heretical Jaina work, the Jivaka Cintāmani and the king thereupon requested him to write down the lives of the Tamil saints. Sēkkiļār then went over to Chidambaram and composed in the beautiful thousandpillard mantapa of the shrine, his famous Purāṇam, which reached a total of 4,253 stanzas. It was recited before the Chola and expounded by the author from day to day for a whole year. It was claimed to be a veritable Fifth Veda in Tamil and given its place as the twelfth book in the Saiva Canon. The author was honoured with title of Tondar-Sīr-Paravuvār (the singer of the glories of the saints)—and adorned with the crown of knowledge (Gnanamudi) and saluted by the Chola monarch. Umapathi's account of this must be "read in the original for one to realise the gusto with which that author celebrates this epoch-making event in the history of South Indian Saivism." The Chola monarch referred to was Anapāya who covered the Pērambalam with fine gold and who is equated with Kulottunga II.

The *Tiruvilayādal Purāṇam* of Perumbaṛṇapuliyur Nambi can also be associated with Chidambaram, as its author was the spiritual disciple of a certain Vinayaka who belonged to Māligaimadam in Chidambaram and who perhaps assumed the name of Puliyūr Nambi to indicate his devotion to the shrine of Nataraja. This work is held to be far more authoritative and truer to history than Paranjoti's much later version of the "Sacred Sports", as has become evident from its text as edited by Dr. Mm. V. Swaminatha Iyer, 'the Prince of Tamil Scholars.'

Thus we find that, in the hymnal age of the history of Saivism, Chidambaram played a most important part. In the next age of the development of Saiva Siddhanta which has been termed the 'exegetical period' in the evolution of Tamil literature, we witness again the close association of the shrine with one of its four great teachers, Umapathi Sivacharya. The detailed complex of the Siddhanta philosophy is very difficult to understand; but a sort of incomplete sectarian organisation early grew round its literature and its monasteries which have been efficiently functioning as schools of theology and learning in which the monks are trained and priests learn their art. A number of these monasteries are situated in the Tanjore delta and several of them have filiations with Chidambaram.

III. THE CHOLAS AND THEIR PATRONAGE OF THE SHRINE.

The Temple goes back in its nucleus to Pallava times though no records even of the early Cholas of Tanjore, not to speak of the Pallavas, are forthcoming from the place. Copies of inscriptions belonging to the twenty-fourth year of Rajendra Chola I (1012-1043) and the forty-seventh year of Kulottunga Chola I (acc. 1070) are found on the temple walls; two short records that are claimed to belong to the tenth century Cholas have been discovered in the local Anantiswara shrine; but the earliest genuine inscription engraved in the great temple is dated in the third year of Vikrama Chola (1118-1133).

But we have other evidence that the earlier monarchs of the Vijayalaya dynasty of the Tanjore Cholas were great patrons of the shrine. 'The Brahadīsvara Temple at Tanjore seems to have been an offshoot from the Nataraja shrine. Parāntaka I, Vira Narayana (A.D. 907-947), the great ancestor of Raja Raja Chola (985-1013 A.D.), was distin-

guished for his devotion to the Chidambaram shrine; and he either built or repaired the golden hall at that place. Rajaraja was equally attached to God Kanakasabhapathi; and very probably he owed his titles, Sri Rajaraja and Sivapādasēkhara, to the authorities of the Chidambaram shrine, which is designated the Temple (Kōyil) in the Tēvāram hymns, the Tiruvisaippa and the Periyapuranam. The name Adavallān (one who is able to dance) was given to one of the principal deities in the Tanjore Temple, from that of the Chidambaram deity. Several variants of this particular designation are found in the inscriptions; and from two of them (Nos. 65 and 66 of the Tanjore inscriptions) it is clear that "the names of the god as well as of the temple at Chidambaram, and their various synonyms, were very commonly borne by men and women during the time of Rajaraja." The chief deity of the Tanjore Temple was known as Ādavallān, as well as Dakshina Meru Vidangan. two names are applied in the Tiruvisaippā to the Chidambaram deity and subsequently to the Tanjore god.

The wall round the innermost shrine, comprehending the Rahasya, the Chit Sabha and the Kanaka Sabha and the other prākāra wall enclosing the Mulasthāna shrine, are both known by the name of Vikrama Sōlan Tirumāligai. The inner of the two walls is also known as Kulōttunga Sōlan Tirumāligai in four records; perhaps it was built by the father Kulōttunga, and either repaired or rebuilt by the son, Vikrama who might have called it after his father. Certainly, Vikrama should be credited with the construction of the outer prākāra wall. Perhaps also, the Mūlasthāna shrine was renovated about this period and its inscriptions were transferred to the prakara wall of the innermost enclosure.

Most of the inscriptions refer to the Chola kings of the twelfth and thirteenth centuries and later dynasties. Mostly

they register grants of lands for temple service and offerings and for the maintenance of feeding houses and agrahāras in the locality. All land gifts made to the temple were required to be engraved on its walls. Up to the time of Vikrama Chola these were made out in the name of Chandēswara, evidently pointing to the earlier importance enjoyed by the Mūlasthāna shrine, with the image of Chandēswara by the side of its Linga. It may be remarked at the same time that the Tēvāram hymns have been always sung only in the shrine of the Mūlasthāna. The prominence given to the Nataraja shrine in later inscriptions accounts for the substitution of the caste committee of Dīkshita priests in the place of Chandēswara, and this change suggests one of the reasons why the Dīkshitas have come to be regarded as the practical owners of the temple.

Besides Parantaka who covered the Dabhra Sabha with gold, we find a Chola Princess, Kundavai, who belonged to a later age, claiming credit for a similar act. Kulottunga I is mentioned by his title of Jayadhara in an inscription in the shrine, which is of some historical value. Kulottunga II is held by his court poet to have covered the Nataraja shrine with gold; and this credit, as in the case of the inner prākāra wall, may well be shared between his father Vikrama and himself. The praśastis of Kulottunga II tell us that he "wore the crown in such wise as to add lustre to Tillainagar." An inscription of his seventh year from Tiruppurambiyam (350 of 1927) explicitly mentions, for the first time, his renovation of the temple and town of Chidambaram, though in a record of his third year, he gets a title based on this achievement. Kulottunga is said, in this inscription, to have worshipped the Dancing Siva of Chidambaram, in company with his queen, and to have removed the little God Vishnu from the court-yard of the sacred hall

of Tillai; he claims to have built numerous structures, including gopurams with seven tiers and also the shrine of the Goddess Śivakāmi Amman, which "delighted her heart so much by its size and its splendour that she did not think any more of the sacred mountain (Himalaya) that gave birth to her." These are recorded in briefer form in the Rājarāja Śōlan Ulā and in the Takkayāgapparaṇi and much more detailedly in the Kulōttunga Śōlan Ulā, of the famous poet, Kavichakravarti Ottakkūttar, whose memory is kept green even to this day, not only in literary tradition, but also in the name of the village Kūttanūr on the banks of the Arisil river in the Tanjore district.

The hundred-pillared hall to the west of the holy tank is claimed to have been built by one Naralokavira, alias Ponnambala Kūttan, a feudatory of Kulottunga I and of his son Vikrama, whose epigraphs share some of the best literary qualities of the Chola imperial prasastis. The powerful Kulottunga III (1178-1216) has several inscriptions of his, engraved on the temple walls which credit him with the construction of the mukhamantapa of the Nataraja shrine and the gopura and the enclosing verandah of the Sivakāmi Amman shrine. Even in the declining days of the Chola power in the thirteenth century, we find that Chidambaram enjoyed patronage at the hands of both the Chola overlords and their vassals. The most prominent figure in this connection is naturally Köpperunjinga, a contemporary of Raja Raja III (1216-1246) and an over-grown feudal vassal This chief who belonged to the family of Kādavarāvas and ruled from Śendamangalam in the middle of the present South Arcot District, became an independent ruler in 1243 and counted his regnal years from that date. titles included the name of Alagiyasīyan and Kanakasabhāpathi Sabhā Sarvakārya Sarvakāla Nirvāhaka,—a title that

was justified by his close association with the shrine. Several of his epigraphs are found on the temple walls. He is credited with the construction of the east gopura of the temple according to a trilingual inscription from Tripurantaka in the Kurnool district, wherein we read that he decorated the four sides of the tower with "booty acquired by subduing the four quarters." It is on both sides of the gateway of this gopura, in the panels of the projecting pillars, that we find rich sculptures of dancing figures depicting the 108 postures, described in the Bhāratīya Nātya Sāstra. 93 of these have descriptive labels in grantha characters engraved on them. These have been illustrated with the corresponding verses occurring in the Sastra, in the Annual Report for South Indian Epigraphy for 1914. The book on 'Tandava Lakśanam or The Fundamentals of Ancient Hindu Dancing (by B. V. N. Naidu, P. S. Naidu and O. V. R. Pantulu, 1936), gives a very instructive account of the sculptures of the dancing figures represented in the gateway of the east gopuram as well as those found in the gateway of the western gopuram. The 108 classic postures seem to have been sculptured on all the four gopurams, but the explanatory labels are found only in the eastern and western towers.

In this connection may be mentioned similar figures of dancers and musicians, sculptured in continuous relief all round the basement of the thousand-pillared hall and in a well-preserved ring running along the basement of the pillared and storeyed corridors enclosing the courtyard of the Sivakāmi Amman shrine. Kopperunjinga's inscriptions are also found on the walls of the Tillaiamman temple² (Srī

^{2.} This ancient temple was renovated about three decades ago by the family of our Raja Sahib.

Köyil of Pidāri Tiruchchitrambala Mākāļi). The tradition is that the Goddess who represented an earlier indigenous cult, was danced out of the Tillai shrine by God Nataraja in his famous *Urdhva-Tāṇdava* dance in the *Nritta Sabha* of the temple which has been deemed by Fergusson to be a most precious piece of workmanship in sculpture and as containing dancing figures, "more graceful and more elegantly executed than any other of their class, so far as I know in Southern India." In the Bhimēsvara temple at Śingāratōpe, a suburb of Chidambaram, we find another inscription of Kōpperunjinga. One of his chiefs Śōla Kon, alias Perumāl Pillai, set up three pillars in the great shrine for the merit of his master.

The powerful Pandyas of the thirteenth century who overshadowed the Cholas, continued the role of their predecessors. Jatāvaraman Sundara Pandya I (acc. 1251) was anointed victor-hero and celebrated the Tulābhāra ceremony at the great shrine; and epigraphs of his found engraved on the eastern and western gōpuras, describe some of his achievements. A few of the succeeding Pandyas performed likewise in Chidambaram their abhishēka and commemorated their victorious campaigns. It is noteworthy that the Pandya fish-crest is engraved in the ceiling of the gateway of the great southern gōpura.

Among the benefactions to the temple made in those days may be mentioned the foundation of feeding-houses and the initiation of systematic ceremonial offerings of food to the God known as $p\bar{a}v\dot{a}dai$, observed even to this day, according to which boiled rice of a determinate quantity is spread evenly over a plank measuring about 6' x 4'. in front of the God and distributed among the priests. One of the earliest feeding-houses of which mention is made, was the

Arapperunjelvi Solai, in the western street called Mudikondaperumāļ Tiruvīdi, perhaps named after Kulottunga III. who took the crowned head of the Pandvas. The settlement of the Śōla Śāliyars (or weavers) who are even now a numerous community of the locality, is mentioned in a Pandya record of Māravarman Vīra Pandya (acc. 1262). Another grant of Jatāvarman Sundara makes mention of an agrahāra donated to 108 learned bhattas settled in a village known as Vikrama Pandya Chaturvēdimangalam situated on the western side of Perumbarrappuliyur, who were to be maintained from the income of the village of Puliyangudi. A similar record mentions the grant of 116 vēlis of land in Ādūr, alias Jananāthanallūr, to 108 Brahmans who were to pay four kalams per vëli every year to the temple of Tillaināyaka. Yet another record speaks of a shrine built in honour of Alagiya Tiruchchitrambala Udaiyar hamlet of Korravangudi (alias Pavithramānikkanallūr) near the University campus.

IV. THE VICISSITUDES OF THE TEMPLE UNDER LATER RULERS

The association of the Vijayanagara monarchs with the temple is sufficiently striking, though not as intense as in the case of the Cholas and the Pandyas. King Devaraya II (1422-1446) has an inscription, dated Saka 1349 (i.e., 1428 A.D.) on the north wall of the Karpaka Vināyakar shrine near the west gōpuram, which should interest the student of history as it embodies an account of the method by which temples were then supported and controlled by rulers. It should be a matter of common knowledge that the great Krishnadeva Raya built the north gōpura about Saka 1438, i.e., 1516 A.D., in commemoration of his victorious northern campaign and advance in triumph to Simhadri-Pottunuru where he planted a pillar of victory, after

which he made a pilgrimage to the shrine of Ponnambalam and ordered the building of this tower. A striking and well-formed stone image of his is still preserved in a niche on the western side of the gateway of this gōpura. Achyutaraya was noted for his many benefactions to the shrine of Govindaraja. The Pāsupatiswara Temple at Tiruvētkalam³ (renovated about a quarter of a century ago by Diwan Bahadur Ramaswamy Chettiar, an elder brother of the Rajah Saheb of Chettinad) contains an epigraph dated Saka 1488, recording the grant of that village (the village adjoining the University on the east), by Achyutappa Nayak of Tanjore for the merit of his overlord, King Tirumala I. Later Vijayanagara ruders like Sriranga II (1578-1586) and Venkata I (1586-1614) are mentioned in some epigraphs in the temple; one of them on the south gōpura, dated Saka 1510 (A.D.

3. This village is credited by local tradition as being the place of Arjuna's penance and the present by God Siva of the Pāśupatāstram to the Pandava hero. The temple itself dedicated to Siva has been sung by Saint Appar and Saint Sambandar. The latter refers to the village as being situated near the sea, where the chanting of the Vedas and the performance of the Vedic sacrifices went on; and the former describes the shrine as the abode of the Vētanār, i.e., the Hunter, Siva as Kirāta. It is held by learned opinion that the image of Kirātārjunamūrti in this temple shows unmistakable affinity with Pallava stone sculptures of the seventh century A.D.; and there is reason to believe that it is the same image that Appar saw and the presence of which led him to celebrate the temple in his hymns as the abode of Vētanār. There are two other images of remarkable value and antiquity in the temple, namely, those of Arjuna and Pārvathī. The image of Arjuna is later, but may not be far removed in point of time from that of the Kirātariunamūrti (Vide '.Three South Indian Metal Images-A Study' by T. B. Nayar, 1934, Annamalai University Journal, Vol. III, No. 1).

1588), makes mention of Namassivāya Udaiyār, the superintendent of all the small services in the shrine. The student of Tamil literary history may remember, in this connection, Guru Namassivāya, who devoted himself, at the instance of his teacher, Guhai Namassivāya to holy work at Chidambaram and composed the Paramarahasya Mālai, the Chidambara Venba and other works. The head of the mutt founded by Guru Namassivaya continues to enjoy temple honours even at the present day.

A ruler of Cochin, Maharaja Rama Varma of the family of Śēramān Perumāļ Nāyanār, has left a record in the temple, dated Saka 1498, providing for food offerings to the God. An epigraph of Saka 1515, (i.e., 1593) informs us that the districts of Devāmandala Śīrmai and Vīranārāyana Śīrmai, Terkunādu, Vadakkunādu, the five villages grouped round Asuvur, and all others that had been enjoyed by the temple of Chidambaram from early times, had been made tax-free and fresh provision was made for a huge quantity of food offerings daily under the name of Kondamanāyakan Katta-lai.

Achyutappa Nayaka of Tanjore, as mentioned above, made a gift in 1566 of the village of Tiruvētkaļam to the Tirumūlasthāna temple at Chidambaram for the merit of the Vijayanagara King, Tirumala Raya and also several further endowments to it. Two other epigraphs of Saka 1493, refer to a gift of land made by one Alagapperumāl Pillai to Chidambarēswara for the merit of Achyutappa. It can be safely asserted that the temple received further endowments during the lifetime of that Nayak. Vīrappa Nayak of Madura is credited with having built the outermost stone-faced wall of the Chidambaram temple, which is even now called Vīrappa Nāyakan madīl.

So the temple flourished, if any good flourishing could have been possible in the dark days that followed the disruption of Nayak rule in Tanjore and Gingee, the weakening of the Maratha Raj in Tanjore and the assertion of Muslim and European dominance in the Carnatic. During his southern campaign (1677-78), Sivaji is said to have contemplated the restoration of many Hindu shrines that had fallen on evil days; and we have evidence that he reconsecrated and enlarged the shrine of Tiruvannamālai and restored the celebration of the great Kārthigai festival. Sivaji occupied the Chidambaram district in the course of this campaign. He staved for some time in the neighbourhood of Chidambaram and Bhuvanagiri (literally, Bhuvanēkavīran Pattanam) for effecting a reconciliation with his brother, Vyankoji of Tanjore, with whom he spent some time on the banks of the Coleroon; but we do not know of any gift to or association with the shrine effected by him. In the darker days of the eighteenth century we have got only to note that the temple suffered serious reverses in the course of the Anglo-French wars in the Carnatic and later during the invasions of Haidar Ali of Mysore.

In 1749 the ill-fated expedition of Captain Cope against Dēvikōttah had to take shelter in the Chidambaram pagoda on its retreat. In 1753, the French took possession of it as well as the neighbouring Bhuvanagiri which was then a large weaving centre and partly fortified. They were in occupation of the shrine for several years till 1760 and buttressed the outer walls with bastions and embrasures and otherwise greatly strengthened the western gopura gateway. The importance of the French occupation of the temple lies in its conversion into a military base. A sketch of the fortifications planned, begun and carried out to some extent by the French, is given by the eighteenth-century historian,

Robert Orme, (Vide Vol. III of his History of 'Indostan, being a Collection of maps and plans to accompany that work... Plan entitled 'Chillambarum and showing the fortifications intended and begun by the French) and is well worth a close study, as it discloses the alignment of the bastions and batteries projected for strengthening the outermost wall, as well as for the utilisation of the storeved corridors that lined the inside of the second wall and that have now gone to ruin in many portions. In January 1754, there was an abortive attempt made by the English to force the French garrison which held the pagoda to surrender it; but the attacking party was completely routed. It was only in 1760 (20th April) that the English and their Nawab Muhammad Ali Walajah Bahadur, were able to secure the surrender of the tewn and the fortified pagoda. A party of English troops combined with a body of men under Krishna Rao, the killedar of Tyagadrug, pressed on the place from the south and north respectively, while two eighteen-pounder cannon were taken up the Coleroon on catamarans from the English squadron lying at anchor off Devicottah.4

4. The chiefs of Dēvicottah, known by the hereditary title of Sōla Kōn, corrupted into Sōlaganār flourished since the time of the powerful and dreaded Śōlagan, chief of that Island fortress under Krishnappa Nayaka of Gingee (Cir. 1600). He was attacked by Raghunatha Nayak of Tanjore as being a rebel and taken captive along with his family and thrown into prison. He was very cruel in his punishment of victims; and his cruelty has been described by Father Pimenta, who perhaps visited his fortress. Yagna Narayana Dikshita has referred to the sons and relatives of this Śōlaga in his work. Śōlaga and his descendants had an intimate association with the temple and claimed the right to be crowned in the Rajasabha in the thousand-pillared mantapa. The present representative of the family, who is a poligar, lives in an adjoining village in the jungle at the mouth of the Coleroon,

We may suppose that there was an intermission of the worship, services and festivals in the shrine during the period of its military occupation by the French. Nor was it destined to enjoy unbroken peace even after its recovery by the English for the Nawab in 1760. In the course of the Second Mysore War (1780-1784) when Sir Eyre Coote marched to the southward from Cuddalore June 1781, preparatory to engaging Haidar Ali, he attacked Chidambaram whose fortified pagoda had been for some time under the occupation of the enemy. The latter had taken care to surround the pettah on the west side of the temple with a mud wall; and the place was garrisoned by about 3,000 poligar peons. The pettah was quickly occupied by the English who burst open the outer gate on the west by a vigorous fire but found further advance into the pagoda impossible (18th June 1781). Thus the first attempt of the English to capture the fort failed and Coote retired to the neighbourhood of Porto Novo, where he gained the glorious victory that turned the tide of this critical war.⁵

Dēvicottah was abandoned after some time and has completely disappeared under water, except for some small relics. It is perhaps identifiable with the Jalkotta of the Muhammadan historians, who described the Muhammadan invasions of South India in the fourteenth century.

5. The fortified pagoda of Chidambaram was the main objective of Coote in the campaign that culminated in the great victory of Portonovo. The failure of the English to carry the pagoda by assault to which reference has been already made is well described by Colonel H. C. Wylly, C. B., in his Life of Sir Eyre Coote, K.B., (1922 page 220). The small number of Europeans in his force and his natural desire to save them for more important enterprises had made Coote endeavour to take the Pagoda with sepoys and small artillery. The failure of Coote and the repulse of his forces greatly elated Jahan Khan, the cap-

It was in this period of trouble that the sacred Idol of Nataraja was removed from the Ponnambalam shrine and taken over to Tiruvārūr for protection under the Raja of Tanjore. An inscription in grantha characters in the form of a 'sloka' in the thousand-pillared mantapam refers to this fact and says that it was in the year Saka 1695, Kali 4874 (in the month of Māśi Krishnapaksha, mūla nakshatra, thriyothasi thithi) that Nataraja came to Chitsabha from Tiruvārūr.

V. THE TWIN VISHNU SHRINE OF GOVINDARAJA

It may be, perhaps, instructive at this place to trace the fortunes of the twin shrine of Govindaraja associated from the early times with Sri Sabhanayaka. We know that the Vaishnava deity was praised in song by two of the Ālwārs, Tirumangai and Kulasēkhara and that the worship of the God was in those days conducted by the Tillai Mūvāyiravar. The Vishnu shrine was held in veneration by the Pallava

tain of the enemy troops; and the latter so magnified his success that Haidar Ali at once made up his mind to destroy the English power. He made a forced march of 100 miles in 2½ days and placed himself between Coote and Cuddalore and began to fortify a position, hemming in the British army into an equilateral triangle formed by his camp, by the sea and the Porto Novo river. In the battle the British fleet which was in the roads could not take any part except a small schooner; towards evening when his troops had begun to retreat, Haidar took shelter in Chidambaram but Coote's cavalry was numerically too weak to pursue the enemy.

It was in Chidambaram also that Haidar confined some English prisoners that he later on sent to his capital.

6. A connected account of the Vaishnava shrine was given for the first time by Dr. S. K. Aiyangar, the veteran historian, more than two decades ago in connection with an important suit.

monarch who was a contemporary of Tirumangai and probably Nandivarman II, and was known by the name of Tillai Tiruchchitrakūtam. The Tırukkōvaiyār of Māṇikkavacaga informs us that the God was in a recumbent posture and rested on Adisesha and that his shrine was adjacent to Tiruchchitrambalam in front of the Siva deity. Further, we learn from Vaishnava literature that the Vishnu deity was thrown into the sea and the shrine itself was vacated in order to enlarge the courtyard of Sirrambalam by a Chola monarch, who is called Sennikulöttunga in the Life of Ramanuja by Pillailōkam Jiyar. This monarch has been identified with Kulottunga II, known also as Anabhaya and Tirunīrru Śöla (1135-1146) and this act of the Chola has been described by the poet, Ottakkūttar in two of his works. The date of this act of desecration has been proved by by Rao Saheb an elaborate process of reasoning Pandit M. Raghava Iyengar, to be 1127 A.D. (Saka 1049). The great Vaishnava Apostle, Sri Ramanuja, certainly heard of this desecration of the Vishnu shrine and of the subsequent transportation of the image by some bhaktas to Lower Tirupati. Some time after this, he went over to the latter place where he had the image consecrated and enshrined.

We hear of the next great reconsecration of the Vishnu shrine in the temple in 1539, in the reign of Achyutaraya, under the inspiration of a famous Vaishnava teacher, Doddāchārya alias Mahācharya of Sholinghur. This was effected, according to the Prapanṇāmṛitam by one Ramaraya of Chandragiri, incorrectly supposed to be a brother of Krishnadeva Raya, but in reality a lieutenant of Achyuta who actually consecrated the shrine. This is further supported by the Vāsudēva Charitai (composed in 1543 A.D.) of Varadaraja, in which the author says that Govindaraja worshipped by the dēvas, with Uma's Lord dancing by his side, was res-

tored to his former shrine and praised by Achyuta in some verses. We know further that Achyutaraya built several parts of the Vishnu shrine; and the words used by Varadaraja in his book seem to imply that it was rebuilt after the old model, having perhaps been abandoned all the time. This writer might have actually witnessed the reconsecration ceremony itself. The alleged restoration of the shrine by the Brahman general, Gōpanārya, associated with Kumara Kampana, in the task of the restoration of Srirangam and Madura in the fourteenth century is incorrect.

In Saka 1565, i.e., A.D. 1643, Sriranga Raya of the Aravidu dynasty, then ruling from Vellore, renovated the mukhamantapa and the gopura of the shrine and the vimanas of the goddesses Pundarīkavalli and Sūdikkodutta Nāchchiār and also of the mantapa in front of Tiruvāzhi Ālwān (Inscription No. 271 of 1913) and gave away five villages in rent-free grant for the benefit of the Sri Vaishnavas of the place.

Krishnappa Nayak of Gingee (Cir. 1600) was a zealous patron of Vaishnavism, like his master Venkatapathi Raya of Vellore. He settled definitely the bitter controversy that had been raging over the question whether the shrine of Vishnu should have the Vaishnava symbols placed in front of it, to which the Saiva priests strongly objected. According to the Jesuit writer, Father Pimenta, who has given a succinct account of what he saw in the temple when he visited the place in 1597, the protest ended in the violent death of some of the objectors and the work of construction was carried on to its conclusion. The Sanskrit work, Prapannāmirtam, claims that the Vaishnava scholar Mahācharya defeated in scholastic disputes the Saiva scholars of Chidambaram, among whom was included even the famous

Appayya Dikshita, so well known for his devotion to God Nataraja.

In the last decade of the eighteenth century, there arose a renewed dispute between the two shrines, leading to the stoppage of the worship in the Vishnu shrine for some years and even the walling up of its entrance. It was settled by the arbitration of the Nawab's faujdar of the district and confirmed by a parwana of Nawab Omdut-ul-Umarah Bahadur of the Carnatic, dated 1797, which defined the respective rights and claims of both the parties.

After the establishment of British rule over the district when swords were turned into plough-shares and battle-axes into pruning hooks, the disputes between the two shrines were fought out in the law courts, off and on, with varying fortunes. Now the main points of contention have been settled fairly amicably and the managers of the two shrines have agreed to work harmoniously, largely through the mediating efforts of the Rajah Saheb of Chettinad, who renovated the ruined mantapa in front of the Vishnu shrine, repaired the shrine itself which was in a dilapidated condition, reconstructed the gōpura and the vimāna over the Garbagraha and reconsecrated the sannidhi itself in the summer of 1934.

Thus we may summarise the vicissitudes in the fortunes of the Govindaraja Shrine in these words: "In the eighth century, the Vishnu shrine was consecrated by a Pallava ruler,—most likely Nandivarman II—praised by Tirumangai Alwār. In the first half of the 12th century, it was desecrated by a Chola, most likely Kulottunga II; in the first half of the sixteenth century, it was renovated by Achyuta Raya of Vijayanagara; and towards the close of that century it received the patronage of Krishnappa Nayak of

Gingee; and later it was further enlarged by Sriranga IV. In 1934 the shrine itself which was in a ruined condition was renovated at a considerable cost through the munificent generosity of the Rajah Saheb of Chettinad, as noted above.

Thus it appears from the history of the shrine that it has been fated to undergo a critical change in its fortunes every four centuries.

VI. THE GROWTH OF THE TEMPLE IN RECENT TIMES.

Lord Valentia, an English nobleman of high rank, who visited the shrine in 1803, gives a very good picture of the temple as he saw it then: He thus wrote: -- "The gateway by which we entered had lately been repaired by a devout widow, at the enormous expense of forty thousand pagodas. The whole of the architecture had a more ancient appearance than Tanjore or Ramiseram. Facing the entrance they were erecting a portico of one hundred fluted pillars, in some parts three, in others five deep; the roof was not yet laid on. We then proceeded in a winding direction to the entrance of the most holy temple. This building is more ancient, and the style much purer than the others around it; even the carved figures shewed in the artist a more just attempt at proper action than is to be found in the rest. A small temple facing us on our return, was of the same architecture and the carved figures had equal merit." This last was evidently the Nritta Sabha.

The widow referred to above, was the wife of the great philanthropist, Pachaiyappa Mudaliar of Conjeevaram (1754-1794), who was Dubash for some years for the East India Company at the Tanjore court and who devoted his extensive wealth for religious and educational charities, including among them large benefactions and kattalais for the Sri Sabhanayaka Shrine. He started in 1791-92 the

second Brahmōtsava of the shrine, by name Ani Tirumanjanam, which he arranged to be celebrated on an equally grand scale with the Arudhrā Darśanam. He built the carstand, renovated the temple cars and revived the car festival which had fallen into desuetude for some time. He arranged for the starting of a Sanskrit seminary at Chidambaram and persuaded his rich friend, Manali Chinniah Mudaliar, grandson of the famous Dubash of Lord Pigot, Manali Muthukrishna Mudaliar, (who constructed in Madras the shrine of Chennakesava Perumal and Chennai Mallēswaraswami about 1763) to endow large benefactions to the Sabhanayaka Shrine, which included the maintenance of flower gardens and the plating with silver of the Panchākṣara steps leading into the innermost sanctum.

Pachaiyappa had also planned the reconstruction of the east gopura which had become dilapidated; but as he died before he could undertake the work, his widow and his sister who carried out his will, took care to complete that injunction, as noted by Lord Valentia. A stone image of Pachaiyappa and another of his sister and mother-in-law, by name Subbammāļ, are to be found in niches on the southern side of the gateway of the east gōpura. The many-sided charities of Pachaiyappa were first detailed in a number of songs about 1840 by great Tamil scholars like Malavai Mahalinga Iyer, Head Tamil Pandit of what was then known as the Madras University, subsequently the Presidency College, and Mahavidwan Sabhapathi Mudaliar of Conjeevaram.

Likewise, the rich Nattukottai Nagarathar community comprehended a thorough renovation of the great shrine in their schemes of reconstruction of South Indian temples; and a considerable sum of money was devoted to this purpose by the family of the Rajah Saheb which began the work of re-

construction in the seventies of last century on a lavish and magnificent scale, and the result has been the renovation of all the gopuras, the restoration of almost every shrine to greater grandeur of appearance and ornamentation, including the gilding of the roof of the Kanakasabha, the repair of the enclosing walls, the broadening of the stone steps and corridors of the sacred tank and above all the construction of the magnificent corridors round the second prākāra, recalling to mind the spacious splendour of the Rameswaram corridors. Besides these the charities of the family have provided for a number of ubhayams and kattalais in the temple and for the reconstruction of the cars and for the provision of a great quantity of lamps, vessels, vāhanas and other appurtenances, many of them of silver, for use in the service of the deities. There was a great consecration ceremony conducted under the auspices of this noble charity in 1891. The work of renovation in several other parts of the temple was continued for over a quarter of century after this date. Three generations of the family of the Rajah Saheb have devoted themselves to this great task of the restoration of this ancient shrine to more than its pristine glory. Metal images of the parents of the Rajah Saheb, holding ever-burning lamps in their hands have been installed in the Kanakasabha, in token alike of their religious devotion and magnificent generosity.

The Rajah and his elder brother, Diwan Bahadur Ramaswamy Chettiar, have likewise developed the town and increased its amenities for cultured life. Schools for the propagation of Vedic and Agamaic learning and for the revival of $T\bar{e}v\bar{a}ram$ singing and studies, and magnificent choultries, which have practically thrown into shade and idleness, by their huge feeding, earlier foundations,

and Gorakshaśālas and flower-gardens may also be many-sided benefactions. their among mentioned Modern amenities like the well-equipped high school, started a quarter of a century ago by Mr. Ramaswami Chettiar, the protected water-supply which has scared away foul diseases like cholera and elephantiasis from the town, also due to his generosity, and the building of a town-hall for the expression of the common life of the citizens and named after the Rajah Saheb, as Annamalai Town Hall these show to what extent the Rajah's family have devoted themselves for the exaltation of the shrine and the improvement of the town, to which has been added practically another town and temple of learning in the shape of the University settlement, which may be called the most expressive of the Rajah's innumerable and wide-spread charities and may be claimed to be the most potential for good as well as the most fruitful among them all. It will not therefore be inappropriate that the Rajah of Chettinad should be honoured, like his royal and semi-royal predecessors in the patronage of the temple, with the titles of Sivapāda Sēkhara and of Kanakasabhapathi Sabha Sarvakārya Nirvāhakā. Let us hope that, under the Rajah's fostering care, the twin towns of Chidambaram and Annamalainagar, the one conserving the culture of the past and the other endeavouring to realise the aspirations of the Tamils and their cultural development, may grow in strength and usefulness and expand, as of old, so as to take in all the neighbouring hamlets like Sivapuri (reminisdent of the settlement of Jaffnese Saivites7 taking refuge from persecution in their own home) Vikrama Śōlanallūr and other surrounding villages as it did in the golden days of Chola rule.

7. A part of Chidambaram, round the tank of Gnānaprakāsar, a scholar of the 17th century, has been associated with a Jafinese settlement; and God Kanakasabapathi has ever been their chosen deity.

STELLAR DISTRIBUTION.

By

DR. H. Subramania Aiyar, M.A., Ph.D.,
Professor, Maharaja's College, Trivandram,
and
Government Astronomer

AND

REV. O. R. WALKEY.

The major problem in modern astronomy is that of the stellar distribution, representing the form and extent of our Universe—the great assemblage of stars, clusters and nebulae segregating towards the Milky Way as their fundamental plane.

The problem has been approached in various ways:—
The individual distances of special types of stars, for instance, the cepheid variables, whereof the regular period of variation is directly related to their intrinsic luminosity, which combined with their apparent brightness gives an accurate measure of the distances of these usually very remote objects. Though lying near to the galactic plane and at great distances, their number is too small to fix the form of our Universe. With cepheid distribution is associated that of the globular clusters, wherein the periods of the faint cepheids have determined the distance of these remarkable objects. The globular clusters, however, do not exceed more than some ninety in number and are found to lie in all directions within a sphere enveloping our galaxy, and so are

no guide to the actual form or density prevailing within the Galaxy. Another line of study lies in deriving the distances from the known mean luminosity of stars of various spectral Then, again, the stream motions found to prevail in have revealed other characteristic directions certain features of our Universe. Another promising method, and that considered in this paper, is the star density, or numbers of stars down to various magnitudes per square degree, in different parts of the sky. The studies made at Mt. Wilson Observatory have (contribution No. 301, 1925) been incorporated with the exhaustive star counts by Van Rhijn and published in 1929 (Pub. Kapt. Ast. Lab. Groningen, No. 43,) detailing the number of stars per square degree according to galatitude (the galactic latitude measured from the galactic equator) towards the north and south galactic poles, and for galongitude (galactic longitude) reckoned eastward along the galactic equator from its intersection with the celestial equator in Aquila.

The abridged Tables I a-e give, for the photographic magnitudes 6, 9, 12, 15 and 18, the star density in numbers per square degree at each 30° interval of galatitude (β) and at every 30° in galongitude (λ), the latter being the average values for the three 10° intervals of galongitude centred at the given directions. This smooths out the effect of local inequalities, whether of condensations (bright patches) or of obscuring clouds (dark patches). The average for each whole circle of galongitude round each galatitude parallel is given in the final column. It may be remarked that galactic latitude -2° is actually the richest belt; but, as this is the evident effect of the actual galactic clouds, the values for $\beta=0^{\circ}$ should give the truer representation.

In order to derive the forms of these stellar spheroids, it will suffice owing to the uncertainties in our premises to assume a generally uniform distribution of the stars, and we therefore take the cube roots of the density numbers to connote the relative boundaries of the respective spheroids in the several directions. These values appear in Table II a-e for the same magnitudes as in Tables I a-e, with the quantities for the whole circles in the final column, as before; the intermediate directions, however, in galongitude are confined to the significant directions $\lambda 150^{\circ} - 330^{\circ}$ and $\lambda 60^{\circ} - 240^{\circ}$, viz., the lines approximately towards and away from the galactic centre, and those at right angles thereto. On the assumption of average uniform distribution of these stars in space. the numbers in Tables II a-e represent the outlines of their containing spheroids. The ratios between the values for the corresponding points for the several magnitudes in such case define the relative proportions of the spheroids between each three-magnitude stage.

Combining the like galatitudes N. and S. of the galactic equator, we derive *Table III*, giving the corresponding ratios for each magnitude considered. The last two columns give the overall ratios for the range of 12 magnitudes—from 6th to 18th pmg—both for triple and for single magnitude ranges.

The Table shows that the distance ratio has a slight but steady increase between each magnitude as the galactic equator is approached; while, at the same time, there is a falling off in this ratio with increasing distance down the magnitude scale.

The planes of condensations found by Van Rhijn from the star counts vary with their brightness, and hence with

their numbers. For the lucid stars, i.e., to 6th (phot) magnitude, the north pole of their plane lies at (1900) $\alpha 188^{\circ} \cdot 2(12^{h} - 33^{m})$, $\delta + 26^{\circ} \cdot 5$. This difference indicates the trend of the stars from the local Cluster into those of the main galactic stream, as their distance increases. spheroids are plotted in Figures 1 a-b and 2 a-b, showing their forms respectively on the galactic plane and that vertical to it; the outlines for the 12th pmg are repeated in the "b" diagrams, these latter being on a smaller than the "a" scale, in order to embrace the much greater expanse in the 15th and 18th pmg. In both sets of diagrams the actual $\sqrt[3]{N}$ values have been plotted for each 10° intervals of galongitude and galatitude (for the latter, even closer within the $\beta\pm20^{\circ}$ zone and derived from the Van Rhijn tables for these closer intervals) rather than for just the 30° intervals appearing in the abridged Tables I and II. The vertical sections in Figs. 2 a-b are chosen along the perpendicular planes $\lambda 150^{\circ} - 330^{\circ}$, [approximately towards and away from the galactic centre ($\lambda 326^{\circ}$)] and $60^{\circ}-240^{\circ}$, crosswise, viz., along the path of galactic rotation. The noticeable "dents" here and there in the vertical sections are evidently due to the presence of obscuring clouds: in the 12th pmg outline, at $\lambda 330^{\circ}$, $\beta \pm 10^{\circ}$ (Ophiuchus) and $\lambda 150^{\circ}$, β -15° (Taurus); in the 18th pmg, a like effect appears at $\lambda 240^{\circ}$, $\beta + 20^{\circ}$ (Antlia). Conversely, the apparent "bulges" predicate bright galactic patches as that at λ60°, β-10° (Lacerta) for the 18th pmg, and that extending at \(\lambda 330^{\circ} \) southward in galatitude from $\beta-10^{\circ}$ (Sagittarius to Grus) for the 12th pmg. The vertical outlines for the 18th magnitude (Fig. 2 b) at $\lambda 240^{\circ}$ and 330° are farther out than their opposites (compare the right and left hand sides in the figures). This shows a distinct "trailing", due, may be, to galactic rotation and also the presumed arm towards the

galactic centre. The same effect appears though to a lesser extent, in the 15th magnitude.

Having derived the comparative forms, the next step is to interpret their scale in distance units. In this connection, we may adopt the results obtained at Mt. Wilson (Contr. No. 281, Seares, 1924) deriving Table IV (a) and quoted by Russel Dugan and Stewart, "Astronomy" p. 665, where the distances near the galactic poles are stated to be about three-quarters of those tabulated, and at the galactic equator an eighth greater than tabled. This table may be expressed empirically by the formula $R=9 (1.46)^m$. where m is the tabulated (visual) magnitude and R the distance in radials; a radial is the distance represented by a parallax of 1'' arc, or 206,265 astronomical units $(19\cdot16\times10^{12}$ miles), and commonly known under the uneuphonious and somewhat inaccurate term "parsec". The mean luminosities follow in the last column from the consequent relation L= $81/1 \cdot 2^m$.

The galactic planar values appear in Table IV b, where the formula has been extrapolated down to the 18th (visual) magnitude, while the intermediate values are entered for the photographic magnitudes 6, 9, 12, 15, and 18, for which Tables I and II are entered. The first two columns in Table IV b give respectively the visual and photographic magnitudes related by the formula, visual magn.=0.3+0.9 (phot magn.). The fourth column gives the corresponding parallaxes (π). The final column gives the mean luminosities (L) of the stars of each magnitude following from the consequent empirical rule L= $100/1.2^m$; whence it appears that there is a decline of $2\frac{1}{2}$ -fold or 1.0 magnitude in real brightness with every 5 magnitudes decline in apparent brightness.

Though it is well known that the apparent brightness (magnitude) of a given star is no index whatever of its distance, yet, taking the stars in their thousands down their successive magnitudes, their average distances may be accepted, as tabled. In order to correlate the distances in Tables IV with those implied in Table II a-e and illustrated in Figs. 1 and 2, we may compare the star density prevailing in our part of the Galaxy. By "star density" is meant the number of stars in a given volume of space, as distinct from "stellar density" which concerns the density conditions prevailing within any given star itself. Recent studies, summarized by Bok (Ap. Jnl. Monograph, "Distribution of the Stars". Univ. Chi. Press, 1937) indicate an overall mean density from 0.05 down to 0.04 solar mass per cubic radial. Within our Local Cluster (see later) the star density ranges from about 0.06 solar mass per cubic radial in our neighbourhood; i.e., 17 cubic radials per solar mass (cp. "Concise General Astronomy", Walkey and Aiyar 1940, p. 238) down to 60% of this in its outer regions Oort's finding, 0.038 solar mass per cubic radial, Bok, loc. cit.). Adopting 0.04 star density, or 25 cubic radials per star as an overall value, we have, for a 5:1 oblate spheroid, the simple relation between its volume and its apparent superficial area as seen by us from within, viz., between $\frac{4}{15}\pi R^3 \times 0.04 = 4\pi (57.3)^2$. Where R is the equatorial radius of the spheroid (5 times the polar radius). This yields a round value of 110 radials represented by a star density of one star per sq. deg. The consequent polar scale being 64 radials for the same star density in the Tables I and II.

The outline for 12th magnitude approaches the boundary of our Local Cluster, some 1500 radials across, and having its north pole at $(1900)^{\alpha}=178^{\circ}$ $(11^{h}-52^{m})$,

 $\delta = +31^{\circ} \cdot 2$ (Seares, Mt. Wilson Cont. No. 347, 1927). This assemblage of stars evidently embodies an inner core represented by what is known as Gould's Belt, outlined mainly by the two great helium (B type) star groups of Orion and Centaurus-Scorpio, and which seem to indicate a circulation round a centre over 200 radials away in Carina, and just possibly marked by the supergiant star Canopus (see "Concise General Astronomy", as above, pp. 269-272). The reality of the group motion in Centaurus-Scorpio has recently been questioned (Smart, M.N., R.A.S., Vol. 100 p. 60, 1939). The evident existence, however, of the Local Cluster should predicate the probability of some circulatory motion within itself-the B type stars in particular show such a tendency (cp. G. Stromberg, Mt. Wilson Cont. No. 492, 1934). This core, tilted some 18° with the main galactic plane, flattens this slope to within 13° (C. Mc Cuskey. Ap. Jnl. Vol. 89 p. 575, 1939).

Though doubted by some, the existence of such a cluster is evident, a general galactic rotation has been established mainly from the apparent radial velocities of the globular clusters—at a speed of some 170 miles sec. round the galactic centre, 10,000 radials away in the direction $(1900) \alpha 17^n - 40^m$, $\delta - 30^\circ$ ($\lambda 326^\circ$, $\beta 0^\circ$), so Plaskett and Pearce conclude (M.N., R.A.S., Vol. 94, p. 679, 1934). More recently, the globular clusters are themselves found (Camm, Ap. Jnl. Vol. 89, p. 45, 1939) to rotate round this centre; allowing for this rotation, that of the Local Cluster is accelerated to some 250 miles per second. The shearing effect of this latter rotation is apparent in the elongation and lopsidedness in the lengthwise and crosswise sections in Figs. 2 a—b., along the path of rotation, which is towards Cygnus. This is borne out by the independent studies summarized by Bok (Ap. Jnl.

Monograph, as above), finding our cluster to be elongated in the approximately same direction, viz., the line, $\lambda62^{\circ}-242^{\circ}$.

These studies also show that the star density, which is constant up to about 600 radials out from the Sun in other directions, drops rather suddenly from 200 radials until 800 radials in the perpendicular direction line, i.e., towards and away from the galactic centre. The resumption in this direction of the normal star density at 800 radials out marks the main galactic densities beyond our Local Cluster.

Table IV(b) however, takes no account of the since discovered absorption of light within our galaxy; for which the most acceptable overall value may be taken to be that derived by Stebbins (Com. Nat. Acad. Sc. No. 111, 1933) as $0^{m\cdot 36}$ (=28%) loss for every "Kiloparsec" viz., 1000 radials, traversed. Incorporating this effect, the revised rule for distance (in the galactic plane) becomes R=10 $\times (1\cdot 45)^{m-00036}$ This relation is plotted in Fig. 3 to derive the revised values of Table V in place of those in Table IV b. The luminosities (Table IV a) remain unaffected since the absorption affects the apparent brightness only.

Did the absorption and distribution functions hold so far the stars at the galactic centre, 10,000 radials away, would appear of 22nd (visual) magnitude. Such, however, is not the case. The polar and equatorial distance scales have been adjusted in the diagrams Figs. I a—b and 2 a—b to the relation pointed out under Tables IV incorporating the absorption distances given in Table V. The resulting trend towards a 1:5 flattening bears out, for our part of the Universe, and generally, the discoid form adumbrated by Sir William Herschel for what was then deemed to be our whole Universe.

Again, we may derive from Tables II a—e and V, the (direction (λ_c) and distance (R_c) of the centroids of the distribution spheroids on the galactic plane, in Fig. I a—b, by simply (within present limits of accuracy) treating each 10° galongitudinal sector as a triangle of area $N^{\frac{2}{3}}$ with its 10° apex at the Sun and its centroid $\frac{2}{3}$ $(N^{\frac{1}{3}})$ out, whence, summing the moments $N^{\frac{2}{3}} \times \frac{2}{3}$ $(N^{\frac{1}{3}}) = \frac{2}{3}N$ round the circle, we get tan λ_c in the usual way. The distance R_c of the centroid follows by dividing the resultant by $N^{\frac{2}{3}}$ (viz., the total area). The results appear in Table VI, giving both the direction and distance of the centroid in each case, together with the increase-ratio for the last three-magnitudes intervals.

With the exception of the 9th phot. mag. (where local effects evidently prevail to deflect the direction,), there is a progressive trend eastward in the galongitude of the centroid with increasing distance. This is doubtless due to the increasing effect of the main galactic distribution as we leave the Local Cluster. To this is evidently due the sudden outward shift of the centroid between the 12th and 15th magnitudes, where the change is about double that between the other intervals. This is because the Local Cluster seems to disappear beyond the average distances of the 12th magnitude stars.

Next, we compare the mean ³√N values at the galactic equator in Tables II a—e for the five pmg's 6, 9, 12, 15 and 18, the increase-ratios in Table III, with the Table V values for R corresponding to the equivalent visual magnitudes, read from the curve in Fig. 3, together with the increase-ratios for these latter over the same 3—magn intervals. The comparison appears in Table VII.

The first two columns in the Table give the photographic and visual magnitudes, the next two columns give the

cube-rooted densities and their equivalent distances by the equatorial conversion factor 110 (see under Table IV b value of 110 for star density of one). The fifth column gives the three—magn increase-ratio (Table III), while the last two columns are read from Fig. 3, as stated, representing Table V. The agreement between the distance (cols. 4 and 6) for these independent lines of approach is a measure of the correctness of the adopted density of 0.04 Solar mass per cubic radial, and the absorption factor (.00036 mag/1000 radials), while the agreement between the ratios (cols 5 and 7) shows how far correct is the assumption of approximately even star density, taking the stars on the whole within their magnitude spheroids.

It should be noted that, in view of the dispersion in actual parallaxes about their mean for a given magnitude, the mean distance in radials for such magnitude is actually greater than entered (Tables IV, V) as correspondent to the mean parallax. To give a simple example; the mean of the five parallaxes $0^{\prime\prime}\cdot08$, $\cdot09\cdot10$, $\cdot11$, $\cdot12$ (a dispersion 20% on either side of their means) is $0\cdot10$, corresponding to 10 radials distance; whereas the mean of their corresponding distances $12\frac{1}{2}$, $11\frac{1}{9}$, 10, $9\frac{1}{11}$, $8\frac{1}{9}$ radials is $10\cdot235$ radials or $2\cdot35\%$ more than would appear in the Tables. This discrepancy lessens as the number of intermediate measures increases.

In conclusion, it should be remembered that the evident, but at present unknown, inequalities of light-absorption prevailing along the galactic belt, necessarily vitiate any detailed findings which, therefore, must not be pressed beyond their general aspect.

LABLE

	All° •039	.044	$\cdot 059$	$\cdot 166$	$\cdot 062$.045	.043
	360°	-051	.071	$\cdot 103$	$\cdot 055$	$\cdot 052$	
	330°	.046	$\cdot 083$.121	$\cdot 059$.044	
	300°	-034	840.	$\cdot 161$	$\cdot 052$.048	
	270°	$\cdot 033$	$\cdot 046$.231	$\cdot 049$	$\cdot 052$	
	240°	$\cdot 045$	-045	.304	$\cdot 051$.048	
	210°	046	.048	$\cdot 203$.063	.044	
	180°	•038	$\cdot 039$	-124	-0.19	.047	
mag.	150°	$\cdot 038$	$\cdot 049$	$\cdot 120$	$\cdot 0.19$	$\cdot 036$	
Vis. m	120°	•044	$\cdot 059$	$\cdot 123$	0.00	$\cdot 010$	
= 5.7	°06	$\cdot 050$	$\cdot 049$	$\cdot 146$	020	$\cdot 021$	
mag.	°09	$\cdot 050$	$\cdot 063$	$\cdot 196$	$\cdot 052$	$\cdot 049$	
phot.	30°	.048	$\cdot 083$	$\cdot 150$.045	$690 \cdot$	
(a) 6th	√ _θ + 3	09	30	0	-30	09	-00

مُخ
Vis. mag
g. = 8·4
phot. mag.
(b) 9th 1

γ/β γ/β) - -	30	0	-30	09—	06.
A11°	0 87	1.32	3.55	1.29	0.91	0.83
360°	88.0	1.38	3 44	1.53	0.07	
330°	0.93	1.17	2.97	1.38	0.95	
300°	0 95	131	3.36	1.05	1.08	
270°	0.91	1.20	4.56	1.07	1.06	
240°	0.85	1.16	3.80	1.20	88.0	
210°	0.78	1.45	2.84	1.47	0.90	
180°	0.75	1.31	3.58	1.49	0.91	
150°	0.81	1.15	3 66	1.26	0.78	
120°	88.0	1.28	2.69	1.31	0.79	
.06	88.0	126	3.11	1.43	0.83	
09	98.0	1.38	4.56	1.24	0.84	
30°	_			1.24		
β/λ +90°	09	30	0	-30	9	06—

110																
3/β	+ 90°	09	30	0	-30	09—	-90	!	γ/β	+ 90°	09	30	0	-30	09—	
All°	10.2	12.6	23.4	89.1	25.1	14.5	13.2		$A11^{\circ}$	95	120	295	1660	302	135	105
360		12.1	24.0	58.9	30.0	14.0			360°		133	331	764	369	148	
330°		12.1	21.2	72.4	31.1	15.1			330°		127	261	1686	494	162	
300°		13.1	24.9	100.0	25.3	15.7		(3002		133	380	2733	404	166	
270°		14.1	26.3	139.1	23.1	14.6		1	270,		139	407	2974	316	151	
240°		13.2	23.6	132.8	22.6	15.0			240°		130	280	3140	302	135	
210°		12.0	23.1	100.0	25.7	13.8		(210°		110	263	2042	341	130	
180°		12.0	24.0	105.5	26.9	12.8		(180		105	267	1585	261	124	
mag, 150°		13.2	22.9	74.1	18.9	14.7		mag. = 13.8 Vis. mag.	150°		106	244	1148	133	123	
l Vis. 1		13.4	20.3	37.4	18.5	13.8		8 Vis.	120°		101	222	471	146	120	
$= 11^{\circ}$		12.3	20.1	54.1	28.4	12.3		= 13.	90		109	200	490	307	114	
mag. 60°		12.0	24.5	108.0	28.6	14.7		. mag.	09		118	255	1349	326	118	
n phot.		12.2	28.6	79.4	24.4	15.6		h phot	30		132	404	1023	261	134	
(c) 12th phot. mag. = 11·1 Vis. mag, β/λ 30° 60° 90° 120° 150	+ 90°	09	30	0	-30	09—	06—	(d) 15th phot. n	"/d	°06+	09	30	0	-30	09—	06—

(e) 18th phot. mag. = 16.5 Vis. mag. $+90^\circ$ 120° 150° 150° 180° 210° 240° 270° 300° 330° 360° All -100° 120°		θ/ν	+ 90°	09	30	0	-30	09—	06—
h phot. mag. == 16·5 Vis. mag. 30° 60° 90° 120° 150° 180° 210° 240° 270° 300° 330° 360° 3211 2058 1647 1370 1391 1610 1738 2692 3861 3090 3043 4074 3211 2058 1647 1370 1391 1610 1738 2692 3861 3090 3043 4074 3121 16096 5843 6407 9988 9848 24356 49736 38019 36588 22908 10391 2121 2171 2026 1193 1015 2011 3441 3020 2570 2951 3286 2733 666 558 650 612 636 753 741 782 905 819 807 878		AII°	617	794	2512	20893	2399	933	501
h phot. mag. = 16·5 Vis. mag. 30° 60° 90° 120° 150° 180° 210° 240° 270° 300° 240° 864 719 580 529 567 656 794 905 919 3211 2058 1647 1370 1391 1610 1738 2692 3861 3090 15971 16096 5843 6407 9988 9848 24356 49736 3801936588 2121 2171 2026 1193 1015 2011 3441 3020 2570 2951 666 558 650 612 636 753 741 782 905 819		360°		977	4074	10391	2733	818	
h phot. mag. = 16·5 Vis. mag. 30° 60° 90° 120° 150° 180° 210° 240° 270° 300° 240° 864 719 580 529 567 656 794 905 919 3211 2058 1647 1370 1391 1610 1738 2692 3861 3090 15971 16096 5843 6407 9988 9848 24356 49736 3801936588 2121 2171 2026 1193 1015 2011 3441 3020 2570 2951 666 558 650 612 636 753 741 782 905 819		330°		955	3043	22908	3286	807	
h phot. mag. == 16·5 Vis. mag. 30° 60° 90° 120° 150° 180° 210° 240° 270 940 864 719 580 529 567 656 794 908 3211 2058 1647 1370 1391 1610 1738 2692 386 15971 16096 5843 6407 9988 9848 24356 49736 38018 2121 2171 2026 1193 1015 2011 3441 3020 2570 666 558 650 612 636 753 741 782 908		300°		919	3090	36588	2951	819	
h phot. mag. = 16.5 Vis. mag. 30° 60° 90° 120° 150° 180° 210° 240° 940 864 719 580 529 567 656 794 3211 2058 1647 1370 1391 1610 1738 2692 15971 16096 5843 6407 9988 9848 24356 49736 2121 2171 2026 1193 1015 2011 3441 3020 666 558 650 612 636 753 741 782		270°		905	3861	38019	2570	905	
h phot. mag. = 16.5 Vis. mag. 30° 60° 90° 120° 150° 180° 940 864 719 580 529 567 3211 2058 1647 1370 1391 1610 15971 16096 5843 6407 9988 9848 2 2121 2171 2026 1193 1015 2011 666 558 650 612 636 753									
h phot. mag. = 16·5 Vis. mag. 30° 60° 90° 120° 150° 940 864 719 580 529 3211 2058 1647 1370 1391 15971 16096 5843 6407 9988 2121 2171 2026 1193 1015 666 558 650 612 636		210°		656	1738	24356	3441	741	
h phot. mag. = 16·5 Vis. 30° 60° 90° 120° 940 864 719 580 3211 2058 1647 1370 15971 16096 5843 6407 2121 2171 2026 1193 666 558 650 612				267	1610	9848	2011	753	
h phot. mag. = 16·5 Vis. 30° 60° 90° 120° 940 864 719 580 3211 2058 1647 1370 15971 16096 5843 6407 2121 2171 2026 1193 666 558 650 612	nag.	150°		529	1391	8866	1015	636	
30° 60° 8211 2058 16 3211 2058 16 3211 2058 16 32121 2171 20 2121 2171 20 666 558 6	Vis.	120°		580	1370	6407	1193	612	
30° 30° 940 3211 15971 1 2121 666		$^{\circ}06$		719	1647	5843	2026	650	
(e) 18th phot. β/λ 30° +90° 60 940 30 3211 0 15971 -30 2121 -60 666	•								
(e) 18t] $\beta^{/\lambda} + 90^{\circ}$ $+ 90^{\circ}$ 0 0 $- 30$ $- 60$ $- 60$	h phot.	30°		940	3211	15971	2121	999	
	(e) 18tl	β/γ	06+		30	0	-30	09—	06-

=	
ĹŢ	
8	
λB	į
۲	•

	θ/γ	.06+	09	30	•	-30	09—	-96
	$A11^{\circ}$	0.340	.353	.390	.550	988.	.356	.348
	330°		0.359	.436	.495	.389	.353	
	240°		0.356	.356	.673	.371	.364	
s. mag.	150°		0.336	.366	.493	-429	.330	
ag. = 5.7 Vi	09		0.368	.398	.581	.373	998.	
(a) 6th phot. mag. $= 5.7$ Vis. mag.	4/8	+ 90°	09	30	0	30	09—	06—

8/1	+ 90	09	30	0	-30	09—	06—	β/γ	+ 90	09	30	0	-30	09—	06—
All°	968.0	0.955	1.096	1.526	1.088	0.970	0.940	All°	2.17	2.33	2.86	4.47	2.93	2.44	2.36
330°		0.977	1.053	1.437	1.114	0.985		330.		2.30	2.77	4.17	3.14	2.47	
240°		0.948	1.050	1.562	1.063	0.959		240°		2.36	2.87	5.05	2.83	2.47	
s. mag. 150°		0.933	1.047	1.540	1.080	0.921		Vis. mag. 150°		2.36	2.84	4.20	2.66	2.45	
$\log = 8.4 \text{ Vi}$		0.952	1.114	1.659	1.075	0.944		mag. = 11.1°		2.29	2.90	4.77	3.06	2.45	
(b) 9th phot. mag. = 8.4 Vis. mag. β/λ 60° 150	+80°	09	30	0	-30	09—	06—	(c) 12th phot. mag. = 11.1 1 1 1 1	+ 90°	09	30	0	-30	09—	06-

8/γ	+ 90	09	30	•	-30	09—	06—	θ/ν	+ 90	09	30	0	-30	09—	06—
All°	4.57	4.94	99.9	11.85	6.72	5.13	4.73	All°	8.52	9.26	13.60	27.55	13.39	84.6	7.95
830°		5.03	6.40	11.90	06.7	5.45		830°		9.85	14.49	28.40	14.86	9.31	
240°		2.07	6.55	14.64	6.72	5.13		240°		9.26	13.90	86.78	14.46	9.22	
Vis. mag. 150°		4.74	6.25	10.46	5.10	4.98		Vis. mag. 150°		8.09	11.16	21.52	10.05	8.60	
(d) 15th phot. mag. = 13.8 Vis. mag. β/λ 60° 150°		4.90	6.35	11.05	6.88	4.90		(e) 18th phot. mag. = 16.5 Vis. $\beta/^{\lambda}$ 60°		9.53	12.73	25.23	12.95	8.24	
(d) 15th phot. β/λ	+ 90°	09	30	0	30	09	06—	(e) 18th phot. β/λ	.06+	09	30	0	-30	09—	06-

TABLE III

						Overall	=
Magn.	6th	9th	12th	15t	15th 18th	3-pmg.	1-pmg.
°06 ∓	2.67	2.47	ġ	2.05	1.77	2.21	1.30
09 T	2.71	2.48	જા	2.11	1.89	2.28	1.32
± 30	2.78	2.74	Ġ	2.23	2.02	2.42	1.34
0	2.78	2.93	જા	2.65	2.33	2.66	1.39
			TABL	TABLE IV (a)			
agn.	‡=	R	Lumy.	Magn.	F	R	Lumy
9	0".0120	8	27	10	0.00266	376	13
2	.00820	122	23	11	.00184	543	11
∞	.00562	178	19	12	.00126	793	6
9 vrmula	9 .00387 .mmla R=9 (1.46)"	259	16	$\begin{array}{c c} & 13 \\ & \text{Lumy} = \frac{8 \cdot 1}{13} m \end{array}$.00088	1135	œ
****	(2: -) (-) -						

					$ extsf{TABLE}$	E IV (b)	_				
me	magnitude	de				me	magnitude	e,			
Vis	14	Phot	= =	R	T	Vis	PĿ	Phot	 -	R	_1
2.1			0".0116	98	37	12.0	13		0".0011	006	12
0.9		6.3	.0107	93	34	13.0	14		62000.	1270	10
2.0			$\cdot 0073$	137	29	13.8	15	0.	-000057	1750	80
0·8			-0020	200	24	14.0	15	6 2	$\cdot 00054$	1850	n -t 0 00
8.4			-0045	220	22	15.0	16	က	00038	2600	47
0.6			$\cdot 0035$	285	20	16.0	17	7.	.00026	3800	۳. در
10.0	Ť		.0024	420	17	16.5	18	•	.00021	4700	ر 4 ر
11.0	1		0016	625	14	17.0	18	9.	.00018	5600	4 04
11.1	Ä		0016	625	14	18.0	19.7	2.	.00012	8000	4
Formula R	a R =	$10(1.45)^m$	15)"			Luminosity		$=\frac{100}{100}$	ŗ.		
Visual mag	mag =		0.3 + 0.9 (Photo		magnitude)		,	1	•		
	4			ı	TABL	E V					
magnitı	ude			magn	nagnitude			magn	magnitude		
Vis	Phot	E	R	Vis	Phot	⊱	R	Vis	Phot	⊨	R
2.2	0.9	0".012	0 82	10.0	10.8	$0^{\prime\prime}.0025$	400	14.0	15.2	69000-,,0	1450
0 9	6.3	$\cdot 0105$		11.0	11.9	•0018	550	15.0	16.3	.00050	
2.0	7.4	·008		11.1	12.0	.0018	570	16.0	17.4	.00038	
0.8	9.2	$\cdot 005$	4 185	12.0	13.0	.0013	270	16.5	18.0	.00033	
8 .4	0.6	·00·		13.0	14.1	-00095	1050	17.0	18.6	.00029	
0·6	9.1	.003		13.8	150	.00074	1350	18.0	19.7	.00022	4500
		Formul	a R = 1	Formula R = $10(1.45)$	98000			-			

TABLE VI

				; ;	!
	. Vmg	၃	Rc	Rc×110 Kdls	Increase Ratio
	5.7	247.3	0.05	ð.5	
	8.4	350.2	0.03	3.3	
	11-1	253.0	0.50	55.0	3.2
	13.8	260.4	2.80	308.0	5.6
	16.5	251.7	7.85	865.0	8.8
P.m.g	Vmg	3/\r		vn 3√N×110 Ratio	R Ratio
	2.2	0.55			81
	8.4	1.53			215
	11.1	4.47		492	570
	13.8	11.85		1300	1350
	16 5	27.55		3030	3000

Fig. 1-a

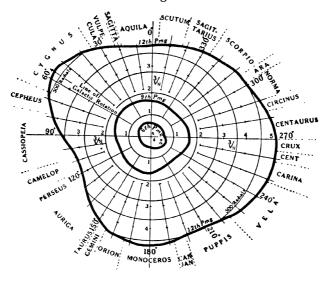


Fig. 1-b

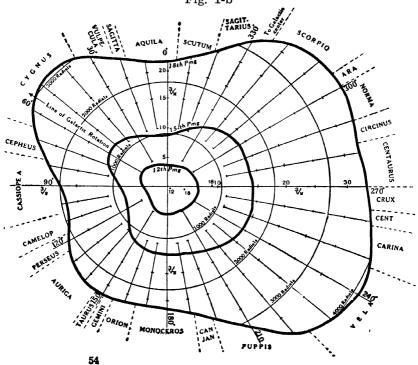
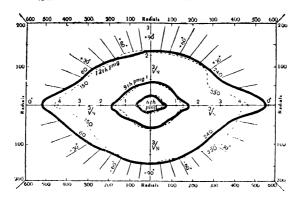
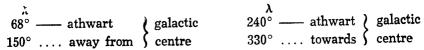


Fig. 2-a
SECTIONS OF STAR SPHEROIDS





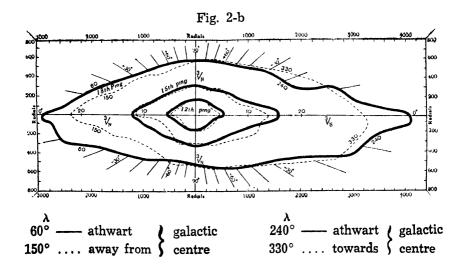
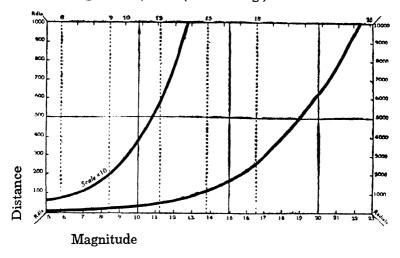


Fig. 3 (Magnitude—Distance)

m=0.00036 R=10 (1.45); m=Visual Mag. Photographic mag.=10/9 (Vis. Mag.) $-\frac{1}{3}$ Visual Mag.=0.3 + 0.9 (Photo. Mag.)



The left hand curve and margin show tenfold enlargement

GALACTIC COORDINATES.

By

DR. H. SUBRAMANIA AIYAR, M.A., Ph.D. (London).

Professor of Science, Muharaja's College, Trivandrum
and
Government Astronomer

AND

REV. O. R. WALKEY.

Introductory

From the first appearance of accurate star catalogues, star positions have been recorded in the order of their passage across the meridian or successive culmination at the highest points of their celestial path—once every 23 hours 56 minutes nearly. This so called "right ascension" is measured as time eastward from the point where the Sun's ecliptic path ascends across the celestial (i.e. sky trace of the terrestrial) equator. The height of each star's culmination marks its declination, measured in degrees etc., north or south of the equatorial line.

What spoils this useful method, however, are the movements of this equatorial reference and the secular drift of the ecliptic (terrestrial orbital) plane's intersection with the celestial equator, due to the various motions of our Earth and their perturbations. These entail some 300 terms in computing the "ephemerides" or reduction of a star's actual position at a given date. This is the case even after the

simplification by Bessel's Tables, published early in the 19th century, wherein the reduction numbers provide for the aberration of light, nutation in latitude and longitude along the ecliptic, and the precession of the equinoxes. These tables welded the shackles of this recurrent toil of Sissyphus, whereof the hill gets a little steeper at every epoch. So, the observations of Lacaille, Bradley, Mayer and Lalande (1750-1800) were imprisoned within the wabbling cage of terrestrial co-ordinates at mean epochs.

In seeking an alternative, one might imagine a conference of deputies from the members of the Solar System, presided over by those from the Sun, to decide the question of star positions. In such a conference, the claims for our terrestrial coordinates would soon be outvoted by the greater claim submitted for the orbital plane of either Jupiter or Saturn, or, better still, the invariable plane of the Solar System (lying in between these two): or again, the equatorial plane of the Sun as the ruler of our Solar system and reckoning along from its intersection with the invariable plane.

FUNDAMENTAL PLANE.

We have, however, in common with the other worlds, an even more fundamental plane of reference, namely the fundamental plane for all the solar systems in our Universe, and marked out by the Milky Way or Galaxy.

Reference to such a plane would fix the star positions once for all, with only their annual variations to be worked out, namely, aberration, parallax and proper motion; the first two, in virtue of our orbital revolution, and the third due to the stars' own motion. The Sun's motion in space would set up a cumulative change, easily allowed for. As things are now, hours, if not days, of work are needed to

disentangle the motion of a star, against the work of minutes, when referred to the galactic plane which is the more natural reference for stellar motions. To take an example, the laborious calculations for the century and a half from 1800-1950 have impressed on the star $^{\epsilon}$ Orionis a total motion of 7 minutes 36.85 seconds in R.A. and 6' 31.0" in declination—a total motion of 114'.4 or 6864", whereas the actual annual proper motion of this star (according to the General catalogue 1936) is 0".000—exactly zero—Whence the labours of reduction through the 150 years are spent to produce an entirely fictitious result.

Right ascension and declination coordinates are unavoidable for determining the position of the Sun, the Moon and the planets and the "clock" stars. A good star map suffices for the coordinates needed to find stars in an equatorial telescope. Though precise galactic positions are needed for any such star catalogue when replacing the shifting equatorial coordinates, approximate star positions can be derived from an accurate network of galactic coordinates at conveniently close intervals. We here adopt the contractions "galatitude" and "galongitude" for the galactic latitude and longitude respectively.

Sir John Herchel (Outlines of Astronomy, 1849) writes thus of the galactic circle: "The circle is to sidereal astronomy what the invariable ecliptic plane is to planetary astronomy". Unfortunately this circle is not precisely defined in the sky, and various poles have been found for it, according to the particular object referred to, though these are in close agreement.

HISTORICAL.

The first reference to the galactic plane was by Sir William Hershel (Phil. Trans., collected Science Papers,

Vol. I, 1875) in his well-known section of the sidereal system in a plane at right angles to the galactic circle having its north pole at the then R.A., (a) 186° (12^{h} — 24^{m}), declination (δ) +32°.

Later on, F. G. W. Struve (Etudes d'Astronomie Stellaire, 1847), mainly using Bessel's catalogue within the zone $\pm 15^{\circ}$ declination adopted the G.N.P. (1875) at R.A. 12^{h} — 38^{m} declination $+31^{\circ}\cdot 5$. Sturve, as well as Sir John Hershel (outlines of astronomy, 1867), analysing the star counts of Sir William arranged the star gauges according to the distance from the north galactic pole, then taken to lie at R.A. 12^{h} — 47^{m} (1913/4°), declination $+27^{\circ}$ (Outlines of Astronomy 1851).

In 1862, Argelander (Bonn Durchm. III) adopted a galactic pole at (1800) R.A. 12^h-36^m declination $+28^{\circ}\cdot 5$ based on the counts of that notable catalogue of 324,000 stars. This however, limited to stars north of declination -2° , covered only just over half the galactic circle, omitting the southern and most relevant part of the galaxy. Heis, using the Bonn Durchm, adopted (1855) $\alpha 12^h-40^m$ $\delta+27^{\circ}$ for his Atlas celestis, and catalogue (1872).

The first extensive use of galactic coordinates was that by A. Marth (Mon. Not. R.A.S. 33, 1872-73) who, setting the G.N.P. at (1880) $\alpha 12^h - 40^m$, $\delta + 30^\circ$, reduced the galactic coordinates for the leading stars in or near the Milky Way. Twenty years later (Mon. Not. R.A.S. 53, 1892-3), he applied these same coordinates to all stars down to 6.0 magnitude on the Harvard Photometry and 6.2 magnitude in the Uranometria Argentina, within 20 degrees of the Galactic equator; Among others, K. Lundmark and O. Jaske adopted Marth's data for their drawings of the Milky Way.

Houzeau (Uranometria-Generale, 1878) placed the pole at (1880) $\alpha 12^h - 49^m$, $\delta + 27^{\circ} \cdot 5$; This pole was adapted by Seeliger (Sitz. d. Math. Phys Akad. Wissen, 14, 1884).

Next year, Gould (Uranometria argentina 1879) made his classic study, based on the galactic clouds, placing the pole at (1875) $\alpha 12^h - 41^m$, $\delta + 27^{\circ} \cdot 3$.

Two years later Schoenfeld (Viert. d. Ast. Gesell, 16, 1881), revising Houzeau's data placed the pole at (1880) $\alpha 12^h - 41^m$, $\delta + 28^{\circ} \cdot 7$.

Wolf (Pub. Ast. Obs. Konigstuhl. Heidelberg I 1902) used the galactic nebulae to place the pole at (1875) $\alpha 12^h - 53^m$, $\delta + 28^{\circ} \cdot 7$.

Next in order, we have Newcomb's exhaustive study (Carnegie Inst. Pub. No. 10, 1904), based on 47 Galactic clouds, together with Heis' star Atlas (1872) and Gould's Uranometria, whence he placed the pole at (evidently 1875), $\alpha 191^{\circ} \cdot 1$, $\delta + 26^{\circ} \cdot 8$ including the well-known Cygnus-Aquilae Branch, excluding which the 42 remaining galactic clouds gave $\alpha 192^{\circ} \cdot 8$, $\delta + 27^{\circ} \cdot 2$ as the pole.

Two years later, Kobold (Der Baudes Fixsternesystems, 1906) derived the pole at (1880) $\alpha 191^{\circ} \cdot 2$, $\delta + 28^{\circ} \cdot 0$ for 33 bright galactic patches, based on Houzeau's work, already mentioned. Stroobant (Annales del' Obs. R.De. Belgigue, 11, 1908) placed the pole at (1900) $\alpha 12^{h} - 46^{m}$, $\delta + 28^{\circ}$.

Professor J. C. Kapteyn published (Gron. Pub. 18, 1908) an extensive table of galactic coordinates, using Gould's pole, above stated, reduced to epoch 1900, and reading to the nearest whole degree at 10^m interval in R.A., and 1° in declination.

Prof. E. C. Pickering (Harvard Annals 56, 1912) published galactic tables for each $40^m(10^\circ)$ in R.A. and 10° in declination, the coordinates reading in degrees and minutes of arc. A converse table reading equatorial coordinates from the galactic was also given for the like 10 square degrees network. The pole adopted was at (1900) R.A. $12^h-40^m(190^\circ)$, $\delta+28^\circ$; which apparently is the adoption of Argelander's pole reduced to epoch 1900.

In the same year E. Hertzsprung (Ast. Nach 4600, 1912) published findings of the galactic pole for various celestial objects segregating towards the galactic plane, such as eclipsing binaries types O and N stars, giant (c, ac type) stars, cephied variables and the Gaseous nebulae. The various poles appear in Table I.

Herschel's pole ($\alpha 12^h-47^m$, $\delta+27^\circ$) was adopted in a compact galactic table by Walkey (Mon. Not. R.A.S. 74, 1914) giving the coordinates to the nearest $0^\circ\cdot 1$ at intervals of 1 hour around the 24 hours in R.A. and at each 10° from $+90^\circ$ down to -90° in declination.

In the following year, R. T. Innes, a consistent advocate of galactic coordinates, and one who published numerous examples in their application, published (Union Obs. Johannesberg, Circular 29, 1915) a table of galactic coordinates in degrees and minutes at 20 minutes (5°) intervals in R.A. and 5° in declination. Innes adopted Newcomb's branch-included pole viz., $\alpha 191^{\circ} \cdot 1$, $\delta + 26^{\circ} \cdot 8$, assuming this for the 1900 epoch. He gave also the parallectic angle-viz., the angle of intersection between the parallels of galatitude and declination at each interval, or between the vertical of galongitude and the R.A. meridian (measured anticlockwise from the galactic to the terrestrial circle). While giving the declination from $+90^{\circ}$ down to -90° , the right ascensions

were condensed into the first 12 hours, the coordinates for the remaining R.A. hours being derived by reversal.

- C. V. L. Charlier of Lund Observatory (1916) derived the pole of the B (helium) type stars at (1900) $\alpha 184^{\circ} \cdot 3$, $\delta + 28^{\circ} \cdot 7$; but these stars belong rather to our Local Cluster inclined at some 13° from the galactic plane. Their pole does not enter into our present consideration.
- W. Gyllenberg. (Medd. Lund, Ser I, IV, 1916) found the pole of the O type stars at (1900) $\alpha 12^h 45^m$, $\delta + 27^{\circ} \cdot 1$.

A Pannekock published (Annals Leiden, XI, 3, 1920) a table set to Marth's (1880) pole at $\alpha 12^h$ 40^m , $\delta + 30^\circ$ giving the galactic coordinates for each 20^m (5°) in R.A. and 5° in declination.

Graff (Ast. Nach 5090, 1921), basing his studies on photometric measures of the galaxy, placed its north pole at (1925) $\alpha 12^h 50^m$, $\delta + 26^{\circ} \cdot 7$.

In a study of star counts, F. H. Seares (Mt. Wilson Contr. 347, 1927) found the pole from counts of stars (indicating 143 million stars) down to the 18th magnitude, to lie at (1900) α 193·6, δ +26°·7.

These star counts were reviewed by P. J. Van Rhijn (Gron. Pub. 43, 1929) in the light of fuller data (estimating 216 million stars to 18th phot, magn.), and he set their pole at (1900) $\alpha 12^h$ $55 \cdot 4^m$, $\delta + 25^{\circ} \cdot 29'$. Accompanying tables give separately the galatitude and galongitude to the nearest whole degree for each hour from 0^h to 24^h R.A. and every degree in declination from pole to pole. Van Rhijn's pole for stars (say 6000) down to the 6th phot. magn. was placed at (1900) $\alpha 12^h 33^m$, $\delta + 26^{\circ} \cdot 5$, these bright stars are however too local to carry galactic significance.

In the same year, P. Emanualli (Publ Specola Vaticana, 14, App. I, 1929) published extensive tables set (as Inne's above-mentioned) to Newcomb's branch-included pole $\alpha 191^{\circ} \cdot 1$, $\delta + 26^{\circ} \cdot 8$, taken to be for epoch 1900, and giving to the nearest $0^{\circ} \cdot 1$ the coordinates for each 10^{m} ($2\frac{1}{2}^{\circ}$) in R.A., (together with a subscribed table of interpolation for each minute) from 0^{h} to 24^{h} and for each degree in declination from 0° to $+90^{\circ}$ and then from 0° to -90° . A supplementary table gives the co-ordinates (to nearest degree) at 1 minute R.A. and 1 degree declination intervals round the N and S galactic poles viz., R.A. 12 to $13\frac{1}{2}$ hours, declination $+20^{\circ}$ to $+34^{\circ}$, and R.A. 0^{h} to $1\frac{1}{2}^{h}$, declination -20° to -34° .

A research by R. Trumpler (Lick. Obs. Bulletin 420, 1930) on 334 open star-clusters, which objects segregate towards the Milky Way, found their pole to lie at (1900) $\alpha 192^{\circ} \cdot 6$, $\delta + 27^{\circ} \cdot 7$.

The most extensive table published of galactic coordinates is one by J. Ohlsson (Lund Annals 33, 1932) giving, as closely as $0^{\circ} \cdot 01$, the coordinates at each $4^{m}(1^{\circ})$ of R.A. from 0^{h} to 24^{h} and for each 1° in declination from the equator to the pole, southern declinations to be obtained by reversal of the tabular entries. The parallactic angle also appears, together with a subsidiary table for conversion to another galactic pole. At the back of the work is reproduced a chart by W. Gyllenberg showing stars down to the 4th magnitude, set to galactic coordinates, the equatorial reticule being superposed for conversion. The mention of such chart leads us, in concluding the historical aspect, to the note on other graphs or charts for deriving galactic coordinates.

A graph published by Nort (Recherches Utecht, VII, 1917) was based on the pole at (1900) R.A. 12^h-43^m , declination+27°.

20'2 407 40 ×20m Rom XIOM B 900 + 270 throughout > B X III B T 900 + 17.0 XIII good to good and throughout & A A A λ 900+27-0 700+ 270 ENFOURAGE TO 903+220 903+220 903+220 907+222 921+326 925+226 920+228 933+220 67+233 561+236 544+284 947+288 949+246 95.1+ 25.0 95.3+254 95.4+25.9 994 22.) 108.1 229 1084 23.7 100.8 24.5 - 80 878 172 887 14 696 673 906 170 91.5 171 923 172 982 175 .08-6 168 /09-5 /8-2 110 3 197 118-0 21-3 -70 913 + 20 934 + 22 955 + 26 975 + 31 945 + 37 1015 + 45 1004 + 55 1052 + 6.6 1069 + 78 1085 492 1101 + 127 1115 + 122 1128 + 139 1140 + 157 1151 + 175 1160 + 195 85.9 7.4 87.6 85.0 +25 87.0 + 22 460 840-25 865-28 890-30 915-30 940-28 965-23 989-18 1013-10 103-6-00 1058+11 1079+24 1160+89 1819+55 1107+72 1154+90 117.0+11.0 89.2 + 20 1184+131 497+153 1208+175 -60° 840-25 200 -40 270 -50 410 -50 170 77 475 72 1003 66 1020 57 1057 46 1082-32 1107-18 1150-01 1152417 573 37 1153 50 1211 34 1543 444 1142 129 1256 154 83-1 74 850 75 887 130 919 130 953 12.7 985 12.1 10.17 17.3 100-8 10.5 1078 9-1 1107 74 113-4 6-4 116-1 141 18-6-2-0 1209 402 1231 425 1851 8-1 1287 104 1802 132 885 180 922 180 95.9 17.6 99.6 17.0 103.2 162 1066 15:0 110.0 126 13.2 18:0 116.2 10.1 119.1 80 1214 58 1934 - 52 1248 -07 129.1 +2.0 1350 74 1348 11.0 131-1 49 81-2 171 84-5 177 85-7 100 712 12-9 76-6 22-6 100-7 21-9 100-7 20-9 105-6 19-7 112-2 18-7 16-5 119-1 74-2 122-3 12-0 125-2 05 1250 6-8 18-0 4-0 123-0-10 135-3+2-1 127-3 53 125-3 88 -40 170-170 \$56-277 \$82 -290 928-279 974-275 151-9 -268 106-3-251 110-6-246 1185-206 1185-206 1121-183 1256-189 1287-152 121-185 1814-7-3 1870-141 199.4-07 141.6+21 143.7+6.3 778-319 628-326 830-330 931-323 952-325 1621-317 1081-305 1127-289 1172-270 1213-248 1252-224 1289-197 1922-169 1354-157 1383-165 1410-71 1435-35 145.94 01 148.1+ 38 87.7 03.0 935 37.7 89.2 37.4 101.7 365 470.1 35.2 115.1 335 119.9 31.4 124/129.0 128.6 264 1924 235 1959 204 199.2 17.1 RAS 192 115.1 10.1 177-7 63 1503-25 1534+14 764 367 820 376 875 430 931 327 1002 1224 1004 413 1124 397 1178 380 1229 357 1217 531 1521 203 1561 \$72 1048 209 1552 1510 9.1 1844 81 1866-11 7413 416 811 425 109 SI2 787 524 868 530 949 829 1550 522 110 6 508 1177 481 1242 467 1301 441 1353 461 1401 818 1443 362 1172 257 1578 2 - 10 184 560 774 -573 864-579 967-579 1569-571 1134-556 121-2-535 1282-510 1344-481 1399-448 1447-413 1440-575 1525-357 1662-396 1390-355 1623-213 1850-170 1676-127 1700-83 6 65.0 -60.7 750 -622 858-629 96.6-628 107.3-61.9 117.0-602 125.6-579 125.1-55.1 189.5-51.9 145.0-48.3 149.8-446 154.0-48.6 1577-266 161.1-324 164.1-25.2 1669-258 1669-258 1669-258 172.1-15.1 174.5-10.7 60.6 -652-721-670 849-679 481-673 100-167 1217-697 1311-601 1569-584 1454-564 1504-516 1555-476 1505-435 1620-083 1662-350 1697-297 1718-263 1716-218 1767-124 1770-124 83.7 729 1003 727 15.6 7/4 128.3 670 138.3 679 1462 62.4 152.5 58.6 1576 54.5 161.9 504 165.6 460 1600 5/0 1717 574 1750 529 1768 285 1792 250 1814 146 1825 1.71 ¥ 10 543 696 67.8 71.8 100 604 105 805 174 828 1124 825 1890 794 1823 762 1806 722 166/3 678 170/6 654 1740 890 1768 809 1815 697 1825 412 1825 308 1875 324 1884 430 1815 678 170 461 805 749 828 1124 826 1825 308 1875 324 1884 430 1815 678 170 1825 412 1825 308 1875 324 1884 430 1815 678 1875 648 1835 604 1878 855 1857 604 1878 1875 1875 678 1875 6 +20 -1-30 319.1-779 3051-800 1816-818 2529-816 231.4-79.5 2134 -763 2117-727 2077-688 2053-648 2040-600 2030-567 2001-026 2020-165 2077-4/4 2693-493 2051-363 2057-363 2072-885 2004-025 4.143 206 646 2956 71-1 2748 719 2635 71-9 1527 709 1495 693 2361 675 2305 643 2262 613 2251 592 2209 647 2193 640 2177 445 2175 167 177 334 2179 344 2179 344 217 2857 051 2814 054 2154 670 2504 607 1370 000 2007 605 2414 657 2455 574 2417 554,2886 532 2341 508 2341 462 2625 656 2344 438 2306 400 2307 372 2299 343 2309 314 2303 336 2724 -512 2748-517 27/4-520 268-0_520 364-5-507 261-5-507 258-2503 2554-493 2528-481 2504-467 2484-451 2466-464 2452-466 241,0-397 2431-377 2424-356 2420-335 2417-214 2417-295 1754 416 1724 419 1707 420 2010 420 501-2 418 2656 410 2624 406 2609 401 2598 392 2583 203 257-2 37-4 1562 264 2563 383 2546 3/1 254 327 2536 217 253 304 2827 281 172 6 368 2715 2.9 2704 37.0 4614 370 255 357 257 357 2652 361 2642 367 2634 367 2618 341 2614 334 2605 527 2600 3/8 3576 311 2523 303 119.0 29.5 255 265 THE SOF ATTER SET AND ADJUSTED ADJUSTED AND ADJUSTED ADJUSTED AND ADJUSTED AND ADJUSTED AND ADJUSTED ADJUSTED AND ADJUSTED AND ADJUSTED AND ADJUSTED ADJUSTED AND ADJUSTED ADJUSTED AND ADJUSTED ADJU & B 2700 1270 taxouphout & B & B X B 270.0-27.0 The To story a granding x 3 x p K B +90 X B 二、 芦 እ. B \sim β \sim Δ fo 40m 40^{m} 2000 11 2300 4.3m 40m 100 m a(20"" $t_i o^{2r_{b'}}$ XIX. XZ. XXII <u>x</u>ir. XET X 20 ly is the יייני ני 2000 2000 4000 202 4000 12 20m VIII 40 \mathbb{Z}_{β} XIX 以 14: TAIL ß . . ്ദ $\lambda = \hat{\beta}$ B Sond to thereighout & B. X & X B X B X B λ ß الوي ... +40 1459 955+203 956+257 956+272 956+476 455+480 954+2814 953+289 951+293 948+296 946+300 942+303 929+307 935+311 93/+3/1 937+3/4 92.2+2/5 91.1 3.31.8 91-2-85-7 45 145 1010 254 1012 251 1012 250 1011 268 1010 237 1007 305 1003 313 999 321 994 328 950 326 981 342 970 348 965 353 956 358 947 262 946 365 916 218 105-0 13-0 1664 242 1066 255 1068 268 1069 281 105-3 29-4 106-6 307 106-3 319 105-8 332 1054 343 104-5 35-5 103-6 37-6 101-5 38-5 1002 39-4 98-0 105-1 97-3 46-7 15-5 91-2 94-1 41-6 1000 750 7664 242 7066 255 1053 268 1057 267 1053 274 1053 274 1053 274 1053 274 1053 274 1053 274 1053 274 1053 274 1053 274 1054 275 1053 274 1054 275 1053 274 1054 275 1053 274 1054 275 1053 274 1056 275 105 130.2 131.6 16.2 132.8 19.2 133.9 22.2 134.7 25.3 135.4 23.5 135.9 23.5 135.9 23.5 135.9 23.5 136.7 33.7 136.7 34.7 136.7 35.7 136.7 35.7 136.7 35.7 136.7 35.7 136.7 35.7 136.7 35.7 136.7 35.7 136.7 35.7 136.7 35.7 136.7 35.7 136.7 35.7 136.7 35.7 136.7 35.7 136.7 35.7 136.7 35.7 136.7 1 430 1700-83 1723-34 1746405 176-9-50 179-1-5 174.5-107 1768 62 179.1-1.8 1813+27 1836+71 1860+11.6 1884+16.0 1908+204 1936+248 1964 1975+383 2029+37.5 2567421.5 211.1.3.454 21604471 CAIT +526 2224+537 2221+5325 21504607 1790-129 1813-85 1835-40 1858+05 1831+48 1904+92 1929+136 1955+179 1982+222 2011 204 2044+305 20799345 2118+003 2162+1201 5214+455 3360 4307 8331+6514 2463 5241 5463 63 1902-18 1925 25 1949 68 1973 111 1999 153 2027 195 2050 275 2125 313 2165 336 2258 335 2277 47 2214-487 2214 475 2467 485 2510 512 + 10 208.4-243 2098-204 21/3-166 213.0-128 2147-9/ 2167-56 2188-20 2210+14 2235+47 2141 78 2289169 2819+137 2352+164 2286+188 2423+210 2462+230 250-3+246 254-6+160 257-0+270 213-7 15-7 2144 200 2162 184 217-7 148 219-3 163 2211 7-9 2220 4-6 2251-1-4 227-4+17 227-4 46 2925 7-4 235-3 10-0 238-3 125 241-5 14-7 248-5 18-5 28-2 200 256-1 212 260-1 221 +40 2017 157 2149 220 2161 184 2177 148 219 143 2211 79 2220 46 2251-14 2274+17 2274 48 225 74 2353 100 238-3 125 2415 147 249-5 185 249-5 185 252-2 200 256-1 212 260-1 221 440 105 249-1 201 2255 167 2239 135 2255 103 2273 73 2212 43 231-3 14 2354 13 2360 38 2387 62 2414 85 2474 105 2475 123 250-7 189 254-1 153 256- 164 161 172 11-8 2454 247 2463 246 2274 185 248-1 153 250-1 153 256- 164 161 172 173 175- 186 248-1 186 259- 186 2417-293 2419-272 2422-251 2427-231 2434-211 2442-191 2451-172 242-153 2474-186 24812 119 250-2-104 2512-8-9 2534-7-6 2552-64 2570-53 2589-44 2509-36 2629-29 2650-25 70 247-4 243 2475 276 2477 259 2480 242 2487 240 2400 194 2587 178 2516 165 3516 189 2552 126 2555 116 2557 106 2579 106 2574 97 ...61-0 89 2520 03 2642 78 3657 74 470 247.4 243 2475 276 247.1 254 2480 242 2480 242 2481 210 2480 194 2581 170 2010 183 251.7 173 2586 163 251.7 185 2607 141 263.1 135 2642 130 2566 135 2668 123 Ø.

Another graph is that published by J. A. Pearce and S. N. Hill (Publ. Domin. Astro-Ph. obsey, Victoria B.C., Vol. IV, No. 4) based on the Harvard pole at (1900) $\alpha 190^{\circ}$, $\delta + 28^{\circ}$.

Maps of the constellation boundaries in galactic coordinates were published by O. Seydl (Publ. Obs. Prague, 5, 1928) using the Harvard pole, $\alpha 190^{\circ}$, $\delta + 28^{\circ}$.

An interesting set of graphs were published by Dr. J. M. Baldin of Melbourne (Mon. Not. R.A.S. 89, 1929), enabling one to read off galactic coordinates, or equatorial, the one from the other, also the distance and position angle of the Solar apex ($\alpha 171^{\circ}$, $\delta + 28^{\circ}$). The galactic pole adopted is again the Harvard one at $\alpha 190^{\circ}$, $\delta + 28^{\circ}$.

DEPARTURE POINT.

A table of galactic coordinates entails the choice of a departure or zero point for galongitude. Various fixed points have been adopted or proposed. Marth, Kapteyn, Pickering Walkey and Van Rhijn adopted the ascending node of the galactic circle on the celestial equator in Aquila with the galongitudes measured eastward thence towards Cygnus Cassiopeia etc. along the galactic equator. This departure point is chosen for a fixed epoch (1900) so as to avoid precessional changes. Innes and Emanuelli, overlooking this epochal fixture, criticised this choice needlessly on the false charge of precessional change. They chose their zero from the galongitude of Prof. W. W. Campbells' solar apex at (1900) $\alpha 270^{\circ}$, $\delta + 30^{\circ}$, as symmetrically dividing as much of the stellar motions as reflect our Sun's motion in space. This point lies some 23 degrees farther, along the galactic equator from the other zero point.

S. Wicksell, investigating proper motions (Medd. Lund Ser II 12, 1915) and W. Gyllenberg, on the distribution of O type stars (Mell. Lund. Ser. II 13, 1915 and I, 75, 1917), measured their galongitudes from a point on the Milky Way approximating to the principal vertex of peculiar motion $-(1900)^{\alpha}18^{h}$, $\delta+18^{\circ}$ (so Charlier, Cal. Lect. 1926)—which choice has the advantage of symmetrical division of the stars' peculiar motions.

The International Astronomical Union, which in 1922 (Trans I A.U. Vol. I, 1922) adopted the ascending node of the galactic on the celestial equator, changed their zero galongitude to the star α Cygni (1900), $\alpha 20^h$ 38^m , $\delta + 44^{\circ} \cdot 9$, lying just north of the galactic circle.

C. V. L. Charlier (Medd Lund II, 14, 1916 and 19, 1918) on the other hand directed his zero galongitude approximately towards the anticentre of the Local Cluster represented by the brighter B type stars, at (1900) °245° 33′ $\delta+55$ ° 37′.

Lastly P. Collinder (Lund Annals, 2, 1931) measured the galongitude of the open star-clusters from Shapley's centre of the globular clusters (Mt. Wilson Contr. Nos. 152, 157, 1918) approximately at $\alpha 17^h$ 30^m, $\delta - 30^{\circ}$.

Fortunately, whatever galongitudinal starting point be chosen, the conversion from one departure to another—with the same pole—involves merely changing all the galongitudes by the difference in galongitude between the two origins, the galatitudes remaining unchanged.

CHOICE OF POLE.

The fore-going account of various poles found for the galactic plane, and the consequent uncertainty within narrow limits, entail the choice of the most representative position where on to base any table of galactic coordinates.

The most relevant findings appear in Table I (given at p. 445) all reduced to the 1900 epoch.

These points are likewise plotted in Fig. I following covering an area of 8 degrees (32 min.) in R.A. and 4 degrees in declination. The figure includes (as falling within its area) some poles excluded from Table I, being ineligible for deriving the mean.

Considering the independence of the researches and the diversity of the objects concerned, the concordance in their poles is remarkable, and indicates the cosmical significance, of the galactic concentration and fundamental plane thereby defined. The findings for the Galactic Belt or Clouds (Milky-Way) are grouped together and yield a simple mean of (1900) $\alpha 191^{\circ} \cdot 7$, $\delta + 27^{\circ} \cdot 3$, Newcomb's pole tabulated is the weighted mean of his two findings, both with and without the branch, the former being given double weight.

Next follow the Star-count poles, whereof those based in the B.D. (covering about half the galactic circle) as also Seares' should each carry half the weight, of Van Rhijn's revision (which includes that by Seares). These weights yield a mean at (1900) $\alpha 192^{\circ} \cdot 4$ $\delta + 26^{\circ} \cdot 5$.

The third group, comprising specific galactic objects yields a mean pole at (1900) $\alpha 192^{\circ} \cdot 3$, $\delta + 27^{\circ} \cdot 3$. It should be remarked that the trend of the eclipsing binaries, and consequently their pole may be the mere illusion due to a possible parallelism of their orbital planes with the galactic in which the association of these systems with the galactic belt would be the mere selection by eclipses due to our line of sight within the galaxy. Their pole therefore, lying far away from the rest, has been assigned only half weight in the given mean. Combining these means, we get a final value for (1900) $\alpha 192^{\circ} \cdot 1$, $\delta + 27^{\circ} \cdot 0$. In view of their

general agreement, the weighting of certain results makes no appreciable difference from the simple unweighted mean of the twenty entries, yielding $191^{\circ}\cdot 9, +27^{\circ}\cdot 2$. We may therefore accept the north pole of the galactic as lying for epoch 1900, at $\alpha 192^{\circ}$ (12^h-48^m), $\delta+27^{\circ}\cdot 0$. It is noteworthy that the mean of each group agrees with this value in whole degrees. This point appears (as it happens) at the exact centre of Fig. I, the area covering the various poles mentioned. It is unfortunate that general usage of the Harvard pole at $\alpha 190^{\circ}$, $\delta+28^{\circ}$ and consolidated by Ohlsson's extensive tables based thereon, led the International Astronomical Union (1935) to adopt this pole which, as shown by the open circle in Fig. I, lies outside the run of the plotted poles and fully two degrees away from what must be accepted as the true pole.

FORMULÄE.

We may now consider the process of transition from equatorial to galactic coordinates.

Fig. II, illustrates the outside of the celestial sphere with its north pole at P and crossed by the galactic equator with its north pole at G. The point C with equatorial coordinates α , δ , needs to be transformed to its galactic coordinates, β , λ , where λ is the galongitude measured along the galactic equator from Ω its zero point of intersection with the celestial equator. The intersection of the latter with the ecliptic is at γ the zero of right ascension the positions of P, Ω and γ being for the 1900 epoch. We need to solve the spherical triangle PCG—whereof PC=90- δ , also PG, or the inclination (ι) of the galactic to the celestial equator being 90° less the declination 27° of G i.e., (90°—27°) =63°. The R.A. of G, we know, is 192°, that of Ω is 282°, while that of γ is 0° or 360°. The R.A. (α) of C in the figure is measured as usual eastward from γ (hence round behind the sphere) to C.

Hence angle CPG= α -192°; in our figure as drawn, the R.A. and declination of C are roughly 20^h ; 45° .

By the usual formulae:

Cos CG-cos CPG·sin PG·sin PC+cos PG·cos PC

Sin PGC=
$$\frac{\sin \text{ CPG} \cdot \sin \text{ PC}}{\sin \text{ CG}}$$

which in our nomenclature becomes.

$$\cos(90^{\circ} - \beta) = \sin \quad 63^{\circ} \cdot \cos(\alpha - 192^{\circ}) \quad \sin \quad (90^{\circ} - \delta) + \pi \cos \quad 63^{\circ} \cdot \cos \quad (90^{\circ} - \delta).$$

Whence $\sin \beta = \sin 63^{\circ} \cdot \cos(\alpha - 192^{\circ}) \cos \delta + \cos 63^{\circ} \sin \delta = 0.89101 \cos(\alpha - 192^{\circ}) \cos \delta + 0.45399 \sin \delta$.

Also,
$$\operatorname{Sin}(90^{\circ} - \lambda) = \frac{\sin(\alpha - 192^{\circ}) \cdot \sin(90^{\circ} - \delta)}{\sin(90^{\circ} - \beta)}$$

Whence
$$\cos \lambda = \frac{\sin(\alpha - 192^{\circ}) \cdot \cos \delta}{\cos \beta}$$

Introducing an auxiliary angle $\gamma = CP\Omega = (\alpha - 282^{\circ})$ or $(\alpha + 78^{\circ})$, we may transpose these formulae into the perhaps more convenient forms:

tan $\lambda=0.45399$ tan $\gamma+0.89101$ tan δ sec γ and sin $\beta=0.45399 \sin \delta \ 0.89101 \cos \delta \sin \gamma$ which is fully given by its sign. The quadrant of λ is fixed by the sign of tan λ , while λ and γ both fall either in the first or fourth quadrants, or in the second and third quadrants.

GALACTIC PARALLACTIC ANGLE.

In modern studies, the proper motions (μ) mainly according to spectral type, need frequently to be referred to the galactic plane. This entails the transposition of the

direction (ψ) of the proper motions from the celestial north polar zero to the galactic (north) pole. This is simplest done in correcting ψ by the parallactic angle-called ϕ by Ohlsson. The value of ϕ the angle PCG in Fig. 2—or the angle which the R.A. meridian makes with the galactic polar vertical, is found directly by the formulae.

$$\sin \, \phi = \, \frac{\sin \, \cos \! \lambda}{\cos \! \delta} \, = \frac{0.89101 \, \cos \! \lambda}{\cos \! \delta}$$

Hence we derive the angle (ω) of the direction of μ measured anti-clock-wise form the north galactic polar vertical, viz., $\omega = \psi + \varphi$.

Otherwise, the direction ω may be found direct (as ψ from resolving $\mu\alpha$ and $\mu\delta$) by getting the components of μ parallel to and vertical to the galactic equator.

Thus $\mu\lambda = (\mu\alpha \cos \varphi + \mu\delta \cdot \sin \varphi)$ Sec. β . and $\mu\beta = (\mu\delta \cos \varphi - \mu\alpha \sin \varphi)$.

all symbols (expressed in seconds of arc $\mu\alpha = \mu\alpha \downarrow \times 15$ cos δ as usual.

Fig. 3 illustrates the application.

Partly because the parallactic angle ϕ is actually needed for proper motions and so applies to individual stars, and partly because if applied to the R.A. and declination reticule, these would need to be taken at closer intervals than here to be really useful, this parallactic angle has not been computed for the present table. It can be readily computed from the formulae here given or from the table given in Ohlsson's tables, already mentioned.

COORDINATE TABLE.

Owing to limitation of time and space, also pending the verdict of Astronomers, the coordinates have been calculat-

ed to the nearest 0°1 only and at intervals of 20^m (5°) in R.A. and 5° in declination, as sufficient for the present purpose. A general acceptance would then justify computation to (say) 5^m intervals in R.A. and 1° in declination—it should be noted that 4^m (1') intervals, though closer would involve only five-eights of the work, since the whole degrees are symmetrical about the chosen pole. The galongitudes are measured from their adopted zero at the intersection of the celestial and galactic equators in Aquila ($\alpha 232^\circ$ $\delta 0^\circ$). Adoption of the Solar apex ($\alpha 270^\circ$ $\delta 30^\circ$) reduces all galongitudes by $23^\circ \cdot 2$, while α Cygnus as zero involves reduction by $51^\circ \cdot 0$.

In order to save space and repetition the practice of some previous tables has been adopted so that the upper and left hand margins enter respectively the R.A. arguments up to 12 hours and from the north to the south pole in declination, while the lower and right-hand margins combine the arguments from 12 hours to 24 hours R.A. and from pole to pole in declination, though with the declination signs reversed. Hence, to use the table beyond 12 hours R.A. (i.e. using the lower margin), the λ values need to be changed by±180° and the β values reversed in their sign. For convenient use the final R.A. hours column in each page has been repeated to open the following page; whence too the table begins with the 12 hours/24 hours column duly inverted and the changed λ ±180° and β as just described, so following on into the earlier hours in R.A.

Since the popular adoption was confessedly tentative, awaiting a more certain derivation, it is now submitted that the mean position here derived from the numerous independent researches may be taken as good as ever likely to be found. Hence-forth, popular usage need no longer condone the use of a manifestly wrong position—however great the

1000

wrench from custom and laboriously compiled tables. Fortunately, the commendable fore-sight in adding auxiliary tables in Ohlsson's extensive tables, abovementioned, has (with the implied provision of needful change) provided for the easy transition to any other pole from that $(190^{\circ}, +28^{\circ})$ there given.

Should, what is at present deemed a vain wish, ever be realised in the adoption of galactic coordinates for the stars in general, the order of their cataloguing should best follow Sir J. Herschel's method of distance from the galactic north pole—though in each star's order of increasing distance there-from, rather than by zones. While, with the present terrestrial coordinates, the order of R.A. is, by its very nature, the proper catalogue order, galongitudes carry no such significance in any galactic list. Whereas galatitude, do carry a real significance in the steady increase of star density towards the galactic plane, while a like decrease sets in onward to the south galactic pole.

TABLE I.

		1900		
		α	δ	
ctic belt (7)				
Herschel (1851)		192°·3	+26°·5	
Houzeau (1878)		$192^{\circ}\cdot 5$	27°·4	
Gould (1879)		$190^{\circ} \cdot 6$	27°·2	
		$190^{\circ} \cdot 6$	28° · 6	
Newcomb (1904)		$192^{\circ}\cdot 0$	27°·0	
Houzeau-Kobold (1906)		191°·5	27° · 9	
Graff (1921)	• •	192°·2	26°·8	
	Herschel (1851) Houzeau (1878) Gould (1879) Schoenfeld (1881) Newcomb (1904)	Herschel (1851) Houzeau (1878) Gould (1879) Schoenfeld (1881) Newcomb (1904) Houzeau-Kobold (1906)	ctic belt (7) Herschel (1851) 192°·3 Houzeau (1878) 192°·5 Gould (1879) 190°·6 Schoenfeld (1881) 190°·6 Newcomb (1904) 192°·0 Houzeau-Kobold (1906) 191°·5	

		19	1900	
Star Counts (4)		α	δ	
8.	Argelander B.D.* (1862)	$190^{\circ}\cdot2$	+28°·0	
9.	Heis B.D.* (1872)	$190^{\circ} \cdot 3$	26°.9	
10.	Seares (1927)	$193^{\circ}\!\cdot\!6$	$26^{\circ}\cdot7$	
11.	Van Rhijn (1929)	193°·9	25°.5	
Galac	tic objects (9)			
12.	Wolf (1902) nebulae	$193^{\circ}\!\cdot\!6$	$+28^{\circ}\cdot6$	
13.	Hertzsprung eclipsing Binaries†.	$188^{\circ} \cdot 2$	25°·8	
14.	Hertzsprung (1912) a-ac-stars	$189^{\circ} \cdot 1$	26 ° · 3	
15.	Hertzsprung type O"	$190^{\circ}\!\cdot\! 7$	$26^{\circ} \cdot 9$	
16.	Hertzsprung gaseous nebulae	$192^{\circ}\cdot 7$	$28^{\circ}\cdot 1$	
17.	Hertzsprung type N stars	$194^{\circ}\cdot 2$	$27^{\circ}\cdot 4$	
18.	Hertzsprung Cepheid variables.	$195^{\circ}\!\cdot\!9$	$26^{\circ} \cdot 8$	
1 9.	Gyllenberg (1916) type O stars.	$191^{\circ}\!\cdot\!3$	$27^{\circ}\cdot 1$	
20.	Trumpler (1930) Open clusters.	$192^{\circ}.6$	$27^{\circ} \cdot 7$	

The entries of table I above appear in order of their date of investigation, under each of the three groups, Galactic belt, Star counts and Galactic objects. All positions are reduced to the equinox. Newcomb's pole, presumably referring to 1875 epoch, has been reduced accordingly to 1900, for which the branch included result is given double weight (thus giving the main stream 3:2 weight) Argelander's and Heis' results (*) based on the B.D., (so omitting nearly half the galactic belt and that the southern and most significant section) are assigned half the normal weight. So too Seare's result incorporated with Van Rhijin's is assigned half the weight of the latter. The eclipsing binaries (†) pole too, for the reason stated already should carry alike reduced weight. Hertzsprung's poles for his six set of galactic objects are entered in their order of increasing Right Ascension. The simple unweighted means for each group are respectively

XIII

56m

52m

 $+27^{\circ}\cdot 3$, $192^{\circ}\cdot 0+26^{\circ}\cdot 8$, $192^{\circ}\cdot 0+27^{\circ}\cdot 2$, combining to a mean value $\alpha 191^{\circ}\cdot 9$ $\delta+27^{\circ}\cdot 0$. The simple mean of all twenty entries together yields the virtually like value of $191^{\circ}\cdot 9+27\cdot 2$ the close agreement of which with the weighted mean $(192^{\circ}\cdot 1+27^{\circ}\cdot 0)$ quoted in the text, shows the striking concordance in the negligible effect due to weighting.

193 192 194 191 188 •12 **=**4 16 -6 17 19 15 0 •18 * 14. 26 26 13 **₽**11

48m

44m

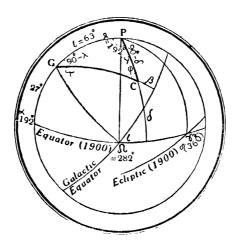
40 m

Figure 1
(Interior of Celestial Sphere)

The above diagram (on polyconic projection) shows the twenty (1900) polar positions entered in Table 1, and covers an area of eight degrees in (1900) R.A., from 12^h 32^m to 13^h 4^m (lower margin) or 188° to 196° (upper margin), by four degrees ($+25^\circ$ to $+29^\circ$) in declination. The seven Galactic belt poles are denoted by squares, the four star-count poles by stars, while the poles of the nine galactic objects appear as circles; all are shown solid and are numbered in their order of descriptive entry in Table I. Besides these, are shown Van Rhijn's pole (12^h $33^m+26\cdot5^\circ$) for the 6th magn. star-counts, also Stroobant's pole, (12^h 46^m+28°) adopted for the galactic belt and evidently as the mean of Houzeau's (2) and Schoenfeld's; (4) The additions appear in open figures and are not numbered since they

are excluded from Table I, not being original findings. The I.A.U. i.e., Harvard, Pole $(12^h \ 40^m + 28^\circ)$ evidently the whole degree derivation from Argelander's reduced to 1900 epoch (8) appears as an open circle standing outside the run of the other poles. The position finally adopted $(12^h \ 48^m + 27^\circ)$ —which as it happens, coincides with the weighted mean of New-comb's poles (5) is shown by the large circle at the exact centre of the diagram.

Figure 2
(Exterior of Celestial Sphere)



P = North celestial pole.

G = North galactic pole.

C = Point for transposed coordinates.

 Ω = Ascending node of the galactic on the celestial equator (1900); λ =0.

 η = Ascending node of the Ecliptic on the celestial equator (1900); α =0.

 $\alpha = Right$ ascension of C.

 β = Galatitude of C.

$$\gamma = Auxiliary angle = \begin{cases} \alpha + 78^{\circ} \\ \alpha - 282^{\circ} \end{cases}$$

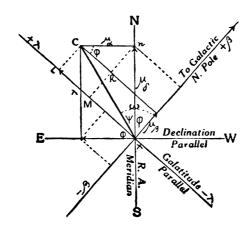
 δ = Declination of C

 $i=63^{\circ}=$ inclination of the galactic to the celestial equator.

 $\lambda = Galongitude of C.$

 $\varphi = Galactic parallactic angle.$

Figure 3 (Interior of Celestial Sphere)



 $\mu = Star's$ proper motion.

 $\mu\alpha =$,, in right ascension.

 $\mu\delta =$, in declination.

 $\mu\lambda =$,, in galongitude.

 $\mu\beta =$, in galatitude.

 ϕ = galactic parallactic angle.

 $\psi = direction of \mu$ in terrestrial coordinates.

 $\omega = \phi + \psi =$ direction of μ in galactic coordinates.

The dotted lines illustrate the algebraic equation between terrestrial and galactic coordinates, thus:— $\mu\lambda = \mu\delta \sin \varphi + \mu\alpha \cos \varphi = XM + ML.$

$$\mu\beta = \mu\delta \cos \varphi - \mu\alpha \sin \varphi = (Mn - nR.)$$
Whence
$$\mu\lambda^2 + \mu\beta^2 = (\mu\delta \sin \varphi)^2 + (\mu\alpha \cos \varphi)^2$$

$$+2\mu\delta \sin \varphi \mu\alpha \cos \varphi + (\mu\delta \cos \varphi)^2 + (M\alpha \sin \varphi)^2$$

$$-2\mu\delta \cos \varphi \mu\alpha \sin \varphi.$$

$$= \mu\alpha^2 (\sin^2\varphi + \cos^2\varphi) + \mu\delta^2 (\sin^2\varphi + \cos^2\varphi)$$

$$= \mu\alpha^2 + \mu\delta^2.$$

*

THE CULTURAL VALUE OF LANGUAGE

By

A. C. Subramanyan, M.A.,

Lecturer in English, Annamalai University.

The Emperor Aurangzeb is said to have complained to his tutor Mulla Shah, that the teacher had wasted precious hours of the emperor's youth 'in the dry, unprofitable, and never-ending task of learning mere words.' The study of the structure and mechanics of language is not a barren and profitless memorizing of dull declensions and confusing It is not a mere matter of musty documents conjugations. and mouldy dialects. The devoted study of language brings the students into contact with the living stream of human consciousness whose beginning no man knows and whose end no human intelligence can predict. For, modern research has conclusively proved that language is a magic speculum in which are mirrored the fortunes of communities and of nations, their greatness and their littleness, the width and variety of their life or the narrowness of their outlook, their tastes and their preferences, their beliefs and their doubts, their culture and their degradation.

Properly understood language is not merely a means of communication between living beings including within its scope signs and gestures. It is neither the mere expression of thoughts by means of words, nor the instrument to hide one's thoughts as the diplomatist, Talleyrand, would have us believe; nor the subterfuge of the emptyheaded to hide the absence of thought as the Russian, Soren Kierkegaard

maintains. To the logician, Jevons, language is a mechanical aid to thought and an instrument of record and reference. Language is no doubt a staff for the average mind; but it is a constraint on genius. To Madam de Stael, the queen of the Paris salons, language is a treasured toy which animates the spirit like music or strong liquors. Often we speak in order to satisfy the craving for sociability. Primitive people often regarded words as potent weapons which could compel the powers to do good or evil. They believed in the efficacy of charms and incantations to bring about evil to their enemies or prosperity to themselves and their belongings. The psychologist regards language as a form of human behaviour. In short, language is the sum of the speech habits of a nation, changing and varying in the course of centuries, enriched by the experience of individuals and nations, continuously flowing and growing, ever advancing to fresh woods and new pastures, a department of human activity as varied as life and as comprehensive as human intelligence.

The very existence, or the reverse, of a refined and cultivated language spoken over a vast area throws light on the government and society of a country. France in the Eighteenth Century was the home of a polished and brilliant language while England in the Thirteenth Century was split up into a large number of dialect areas. This is due to the social and political conditions that prevailed in the two countries. In the Eighteenth Century, France had already enjoyed a long period of settled and centralised government; it had an absolute monarch at the head whose court was the centre of art and refinement. The English court of the Thirteenth Century looked for culture towards France and did not care much for the native tongue. The people lived in isolation, their narrow interests being confined to their

parochial homes. Small wonder then that the English people did not have a common standard language at that time.

The absence of a common language indicates yet another feature viz., the human geography of an area. The linguistic configuration of South India with Malayalam west of the Ghats, Canarese in the Mysore plateau, Telugu in the North East and Tamil in the Eastern plains bears witness to this truth.

Climate, social habits, religion, science and even indigenius have left their unmistakable vidual on language. Close and glottal sounds are more in evidence in the language of a cold country while open sounds are more numerous in the speech of warmer lands. The vocabulary of a people is necessarily limited by the facts of their experience and it is significant that many Indian languages have no word for ice while they have many for the sun. An analysis of the phonological structure of any language can prove without a doubt the influence of climate on human speech. The history of language shows that dialects have been broken up and levelled into some sort of standard speech, by war, by large national festivals, by an exogamous system of marriage and by improved means of communication. Standard language reflects in no little measure the work of Dante in Italy, of Chaucer in England and of Luther in Germany. Modern writers in Tamil and other Indian languages have contributed a good deal to the form and expressiveness of their languages. Standard English is a resultant of the songs of the mediaeval minstrels of the fall of feudalism, of the rise of towns and of the strong and centralised Tudor government. Standard speech in Germany bears witness to the influence of the common life of the soldiers coming together from different parts of the country, to the influence of the officials

transferred from place to place and even to that of the touring companies of actors who wandered through town and village. Universities, public schools, royal courts and fashionable society have all helped to chasten and enrich the language of a nation.

Social outlook and social usages find a very clear reflection in the form and development of the Sanskrit language. Though Sanskrit has to its credit the first grammar in the world and the most scientific phonetic system, over no other tongue does the dead hand of ancient authority lie so heavy as over Sanskrit. Instead of setting forth the nature of the language, grammar assumed powers of direction and control and enforced such rigid laws that a large number of its speakers were driven outside its pale. Authoritarian thought in matters of language contributed to the rise of languages derived from Sanskrit. Testimony to this is borne by the Sanskrit drama wherein king, courtiers and learned men speak in one tongue, while women, children, servants and common people use vastly modified forms. stratification of class dialects and the later rise of derived languages prove the rigidity of the social codes among the speakers of early Sanskrit.

The study of a language reveals equally well the religion and philosophy of a people. Words like church, temple, mosque, synagogue, koil and kshetra throw a flood of light on the religious ideas of the people. Church comes from Greek Kuriakon, Lord's house, and the word was probably taken into Germanic by the mercenaries who served in the East. Temple comes from Greek through Latin. In Greek Temeros meant a sacred enclosure, a piece of ground cut off. Synagogue again comes from another Greek word meaning congregation. The word mosque comes into English from Arabic through French and Spanish; the original Arabic

word Masjida means a place of prayer. The Tamil koil means a prince's house, while the Malayalam kshetra denotes a field. A place or an abode, a place set apart, a place of prayer, a meeting place, a congregation are therefore found implied in these terms. In English, the influence of Latin Christianity is most clearly marked. It is evident in a large number of loan words, in the changes in the meaning of indigenous words, in new coinages and in the very structure and syntax of Old English prose. It is not surprising to find that English as it is to-day has been profoundly affected, by the great religion which its speakers profess. But when we think of the debt of modern English to the philosophy of Greece and especially to the genius of Plato we are filled with wonder. The English word 'quality' goes back to the Latin qualitas which is the translation of a Greek word goiotes coined by Plato to mean "whatness or of-what-kind-ness" i.e. the concept represented by the Sanskrit word guna. By this Plato separated in thought the characteristic feature from an object of which it formed the distinctive sign. Again Plato was the first to use the Greek equivalent for analogy, antipodes, dialectic, enthusiasm (the state of being filled with a god), mathematical, synthesis and system. Method, music, philosopher, sophist, theory, type and irony (simulation of ignorance) will not mean what they do but for the genius of But the new meanings he gave to the words 'idea' and 'ideal' are the most remarkable of all. Before Plato the word 'idea' meant the form and semblance of a thing, being cognate with idein, to see. Cicero translated this into 'species' a word connected with specere, to see and speculum, a mirror. By an extraordinary effort of thought Plato made it possible for us to separate our ideas, notions, thoughts and semblances of them from the things themselves. According to Plato matter is but an imperfect copy of

the ideas or archtypes or perfect spiritual types. These alone persist for ever and these alone are real.

Just as language sets forth the good points of a people it also lays bare their ignorance, worldliness, contempt and The degeneration of meaning which words like knave (lad), villain (peasant), boor (farmer), varlet (serving man) and menial (one of the household) show, is eloquent of the treatment that peasants and labourers received at an earlier time. The present meaning of 'prejudice' reminds us of man's proneness for wrong sions while 'resent' and 'retaliate' show that he is more keen to take offence at injury than to be alive to benefits done. The disrepute into which the words 'simple' and 'innocent' have fallen show how ready the average man is to deceive rather than be deceived. The word 'miscreant' (misbeliever) shows the Westerner's animus against the Moslem and 'assassin' is only another form of 'hashashin' a Moslem fanatic intoxicated with hashish. The word 'dunce' is derived from the name of the wittiest of school divines, Duns Scotus, and records merely the popular prejudice against schoolmen. It is no credit to Hindu humanity that it should have given to English, the word 'pariah' and a new meaning to the word 'untouchable.'

If, therefore, language furnishes us with a dependable key for unlocking the treasures of past thoughts, manners, habits and ideas; if it preserves for us the inner, living history of man's soul and the evolution of his consciousness; if, in short, language is a mirror not only of the outer circumstances but also of the inner working of individual and national life; then, the study of language can never be barren or poor in interest; nor can it be lacking in great humanising and cultural value to those who devote themselves to its study with patience and enthusiasm.

THE NATTUKKOTTAI CHETTIARS AND THEIR BANKING SYSTEM

By

Dr. B. V. Narayanaswamy Naidu, M.A., B.Com., Ph.D., Bar-at-Law.

The indigenous bankers play a very important part in the economic life of India. 'The indigenous banking business is a purely family concern and has become a hereditary calling in particular classes and communities. The Nattukkottai Chettiars are one of the most remarkable banking communities in this presidency and most of them live in the Ramnad District and the Pudukkottan State. The most important centre is Chettinad. "Geographically this tract is an undefined area; but in the regulations that bind the caste of the Chetti community, it is mentioned as the area lying south of the Vellar river, east Piranamalai—a mountain peak that has given its name to the neighbouring village in the north-west corner of the Ramnad district—and west of the sea. A look at the map shows that this tract which, the Chettis say, they selected for their home from the time of their migration from the Chola kindom, lies partly in the Pudukkottah State and partly in the Ramnad district. They have settled down in 78 villages, 20 of which are in Pudukkottah and 58 in Ramnad."1 The Chettiars are called Nagarathars from the fact that they are grouped for social purposes into nine Nagarams or townships.

^{1.} Madras Banking Enquiry Committee—Evidence Volume III—page 1170.

the head of each of these townships there is one temple. The nine temples are:—

Ilayathakudi, Mattur, Vairavankoil, Iraniur, Pillayarpatti, Nemam, Iluppakudi, Suraikudi and Velangudi. Their population according to 1921 census was 40,500 and the caste is divided into twenty five 'gothrams' for purposes of marriage and adoption.

They have extensive banking business in various places in the Madras Presidency and in the City of Madras, Ceylon Indo-China, the whole of Burma, the whole of the Malay Peninsula and in parts of Sumatra. Nattukkottai Chettiars have been conducting their business for centuries on certain well-recognised principles and methods. They have high reputation for honesty and the fact that their methods have stood the test of time clearly proves that they have been conducting their business on right principles. They are born bankers and in the words of Mr. E. Thurston "the Nattukkottai Chettis, in organization, cooperation and business methods are as remarkable as the European merchants.....the simple but strict training which they give their boys, the long and tedious apprenticeship which even the sons of the richest among them have to undergo, make them very efficient in their profession and methodical in whatever they undertake to do."

The young Chetti boys from the age of eight get training in the double entry system of book-keeping. The banks are known in Tamil as 'Thavanaikadai' or 'Vaddi kadai.' Agents are appointed to branches every three years and they are paid salaries in addition to bonuses on profits. A few months prior to the expiry of the period of an agent, his successor is sent to him to take charge and learn the work. The agent who is relieved returns to Chettinad,

settles account and after a period of rest seeks re-employment. The agents and staff live in the place of business in close proximity to the borrowers and are in constant touch with the private lives of the borrowers. Hence they are able to lend to persons without security. In a paper read at the Royal Society of Arts, London, Mr. M. Gubbay, C.S.I., late Controller of Currency and Financial Secretary to the Government of India spoke of Nattukkottai Chettiars as follows:—

A special type (of indigenous bankers) is that of the Chetti community in Madras. It is known that in many cases accounts can be maintained with these Indian banks on which operations by cheques are permissible and that funds lie with these bankers on time deposits at rates much above those which are available from the banks. I see no reason to doubt the commonly accepted view that both because these private bankers can afford to pay attractive rates of interest as well as because their requirements as to security are less rigid, their participation in the financial life of the community, as a whole, must be on a very extensive scale. Further, they are in intimate daily touch with those with whom they transact business and follow the doings of their clients with a closeness which is denied to the banks. There must be accumulated with these private bankers a store of knowledge and experience of the standing, the moral as well as financial capacity of individual Indian traders and Indian trading firms, their business connections and relations on which if fully organised and systematised might possibly quite suitably rest an expansion of credit facilities from the banks. Thus they fulfil one of the three postulates of credit, namely, proximity of the lender and borrower. They lend money to agriculturists for payment of their kists, domestic expenses and

they also finance merchants and traders. They are able to do extensive business because "they grant easy conditions, lend at any time of the day without reference to hours of business.... They also collect money according to their convenience but do not insist on the prompt and punctual payment on the due dates as the banks."

Chettiar firms in Burma and Malay States are large concerns carrying on banking in several places. There are about 95 firms working in Burma, and, as a class, Chettiars in Burma have no appreciable business apart from banking and money-lending. They have given money for various charities. They have founded a residential school at Kaube (1929) near Rangoon and they have endowed a lectureship in Banking and Commerce in the Rangoon University. Chettiars in Burma set apart a definite percentage of their commercial profits for private charity and for making gifts to temples.

In December, 1927, when Sir Hercourt Butler was the Governor of Burma he said in a public speech that Burma owed a great deal to the Chettiars. Addressing them he said, "You represent a very important factor indeed in the life of this province. Without the assistance of the Chettiar banking system Burma would never have achieved the wonderful advance of the last 25 to 30 years. The Burman to-day is a much wealthier man than he was 25 years ago; and for this state of affairs the Chettiar deserves his share of thanks."²

In December, 1929, the public of Rangoon in their address presented to the Hon'ble Rajah Sir Annamalai Chettiar of Chettinad referred to the part played by the

^{2.} Report of the Burma Provincial Banking Enquiry Committee, 1929-30 Volume I page 189.

Chettiar in the growth and development of agriculture and trade in Burma in the following terms:—

"None can realize better than the people of this province the part which Chettiyars have silently played in the development of agriculture and business and it is a tribute to the upright system of Chettiyar banking and moneylending that no other system of finance has yet been evolved which is capable of giving to agriculture and business in this province the impetus and stability which Chettiyars have achieved."

The Committee appointed by the Government of the Federated Malay States in Kuala Lumpur observed about Nattukkottai Chettiyars' banking in their report in connection with the failure of the scheme of Government loans for purely agricultural business as follows:—

"These people have an apparently inexhaustible capital: their sole reason for existing is to borrow and lend money; they are mild and gentle in disposition; among Europeans and Asiatics they bear a good name for honesty It is a well known and even for kindliness to borrowers. fact that where these money lenders know a Malay of good standing, they often lend him money merely on a note with no security at all. As they have been bankers for centuries they know their business. No government fund can hope to compete with them except to a very restricted extent. They live or their agents live amongst their borrowers and can lay a finger on the pulse of any man's business should they care to lay it. They are men of business, not a Government Department, and they know their business as professionals and not as amateurs."3

3. Written Evidence of the Nattukkottai Nagarathars Association, Madras.

The Assistant Commissioner of Income-Tax, Madura, supplied to the Banking Enquiry Committee, information about the wealth of the Nattukkottai Chettiars and he estimated the total at about Rs. 80 erores.⁴

(a) Money-lending (cwn capital)	employe	d in	busii Rs.	ness: —
Karaikudi First Circle			91/2	crores
Karaikudi second circle			16	"
Karaikudi third circle		• •	$4\frac{1}{2}$	"
Sivaganga Circle		• •	6	,,
	1			
	Total		36	"

(b) Investments in houses and jewels:—

"The Nattukkottai Chetti invests largely in houses and jewels, although this is practically dead capital, the reason being that his credit is built on a peculiar tasis. It is the value of his house, the jewellery he possesses and the lands that he owns that determine his credit in the eyes of his own caste-men as well as of others who wish to invest their savings with him. The first instinct of a Chetti who has amassed money is to construct as hig a house as he can. We may see numerous massive, spacious and fine buildings in Chettinad, in an architectural style unique in its own way. In Devakottai alone there are said to be 300 houses costing not less than a lakh each and the Officer has seen personally not less than 100 of them. The total amount so spent in houses is estimated at 6 crores and in jewels another amount of 4 crores

10 croar

u ,

ρf

to cross,

(c) Money-lending capital of the Chettis in Pudukkottalı State, many of whom do business in British India, i.e., in Burma and also in this Presidency.

There are 20 villages with a population of 12,000. They are exceedingly rich and finance businesses in South India, Burma and other places. Capital estimated at 14 crores

14 crores

Houses 2½ crores and jewels 2 crores ... 4½ crores

4. Written Evidence of Mr. A. Savarinatha Pillai, Assistant Commissioner of Income-Tax Southern Range. M.B.E.C. Vol. III.

Rs. Crores

(d) Investments in agricultural lands, house properties, rubber gardens, tea estates, coconut plantations, etc., in Federated Malay States, Ceylon, Burma and other places.

The ownings in distant places can not even be approximately fixed as there is no information available, but it is understood that the Chettis have very valuable possessions abroad in the shape of rubber plantations, tea gardens, coconut gardens in Federated Malay States, Saigon, Ceylog and in Burma where agricultural lands are also extensively owned. In this Presidency the landed properties owned by Chettis and acquired by them mostly in the course of money-lending business are scattered about in numerous districts. Some of them have large cardamom plantations in Travancore hills. Once upon a time there was a craze among Chettiyars to invest in lands and the sentiment of being landed magnates appealed to them and they acquired portions of estates, etc. Now, however, they have stopped this kind of investment as they do not find it profitable. Many Devakottai assessees have a large portion of their assets locked up in this form and are at a disadvantage. The total asset, in the shape of immovable landed properties can be taken at Rs. 15 crores."

.. 15 crores
Total .. 79½ or 80
crores
roundly

The aggregate amount of owned capital rolling in business among Nattukkottai chettis is Rs. 50 crores. The borrowed capital is estimated roughly at 50% of owned capital or at Rs. 25 crores of which Rs. 8 crores belong to Chettiar men and women. Hence owned capital is Rs. 58 crores and borrowings is Rs. 17 crores. The working capital of indigenous banks, on the whole, both in the Presidency and outside is estimated at Rs. 75 crores.

The Assistant Commissioner of Income-Tax gives the number of assessees in the four circles of Karai-kudi I, II, III and Sivaganga, who with their owned and borrowed capital do business locally and outside. The

owned and borrowed capital for 2882 assessees are Rs. 2483·19 lakhs and Rs. 1481·62 lakhs. The difference of nearly 13 erores between the figures arrived at through investigation and by regular assessment to income tax may be due to the inclusion in investigation of those who are not assessed to income-tax.

The amount invested in business in the Presidency can be seen from the following statement submitted to the Committee by the Assistant Commissioner of Income-Tax.—

Name of circles.	Number of bankers doing business locally.	Amount of Capital invested in lakhs.	Borrowed Capital in lakhs.	Volume of business in lakhs.	Expenses in lakhs.
Chettinad.			Rs.	Rs.	Rs.
Karaikudi I	33	238 · 82	$108 \cdot 72$	$347 \cdot 54$	$10 \cdot 77$
" II	14	59.03	123.89	$182 \cdot 92$	$13 \cdot 31$
,, III	74	101.75	53 43	$155 \cdot 18$	$5 \cdot 11$
Sivaganga	15	113.78	58.90	172.68	3.85
Total	136	513.38	344.94	858 · 32*	33.04
Trichinopoly I	21	43.85	22.45	66.30	2.59
do. II	12	12.44	2.21	14·6 5	0.79
Dindigul	19	11.97	25.23	37 · 20	1.99
Madura, North	4	0.65	2.30	2.95	0.22
" South	8	18.93	17.53	$36 \cdot 46$	4.52
Wirudhunagar	10	6.17	5.51	11.68	0.78
Tuticorin	22	17.82	10.76	28.58	1.52
Tinnevelly	11	12.42	28.22	40.64	2.69
Total	107	124 · 25	114.21	283 · 46	15.10
Grand Total	243	637 · 63	459 · 15	1,096.78	48.14
*Distribution— Local mone; Burma Federated I	y lending Malay States,	etc.		3	Rs 17·54 lakhs 13·64 ,, 65·19 ,, 61·9 5 ,,

Thus the amount invested in this Presidency by 243 Nattukkottai Chettiar Bankers is Rs. 456 lakhs. The major portion of the capital of those who do local business in Karaikudi and Sivaganga is invested in Burma, F.M.S. and Cevlon.

An indigenous banker who was questioned in the Coimbatore District said that generally, if about a lakh of rupees is to be the out-turn of business at least Rs. 75,000 should be the invested capital. In his case, that has been the proportion. His bank is now fifteen years old but the origin cannot be traced exactly to the correct date. The maximum expenditure incurred by this banker per year is Rs. 3,500. He employs many clerks on decent salaries. In the year 1929-30, his invested capital was Rs. 120,000 and the out-turn of business was Rs. 2½ lakhs. Gradually this amount began to dwindle; and the capital and business out-turn for the years 1935 and 1938-39 respectively were Rs. 80,000 and Rs. 125,000, and Rs. 60,000 and Rs. 100,000. The banker who was examined was able to estimate roughly the business done in the Coimbatore District.

Year.		Business done.
1929-30		1½ crores.
1935	• •	50 lakhs.
1938-39		20 to 30 lakhs.

The Agriculturists Relief Act of 1938 affected the Chettiar banking business adversely. Roughly estimated the loss incurred owing to the operation of the Act is Rs. 3½ lakhs. The loss was great in the Coimbatore District where almost all the borrowers were agriculturists. Now business with the agriculturists has been reduced considerably. Loans are given only to 'A' class persons whose credit can be relied upon.

DEPOSITS.

Besides his own capital, the Nattukkottai Chettiars' capital consists mainly of deposits received from their own relations and friends and to a small extent from the outside public. In times of stringency they are helped with loans by the Imperial Bank and other big joint stock banks.

A feature of deposits made by persons of the Nattukkottai Chetty community is the depositing of their funds in different shops to avoid any risk. Deposits received by various Nattukkottai Chettiars are mostly from their own community. The Commissioner of Income-Tax Madura. calculated from the figures given by officers in Chettinad that the number of persons who derived income from interests on deposits alone were 823 and the amount so deposited by them was Rs. 4½ crores. If the deposits of those doing business were included, total deposits amounted to nearly 8 crores. It is difficult to estimate the amount of total deposits of the Nattukkottai Chettis. It is only recently that the deposits from the public have dwindled. The deposits are made in urban areas but not in rural parts. In Madras and other places legal practitioners and others who have dealings with Chettiars deposit their moneys with the Chetti firms as a higher rate of interest can be obtained. As in other banks, the normal rules of keeping a proportion of deposits in cash or in forms readily convertible into cash are not observed by Chettiars. long as the debtors were keeping up their credit, the Chettiars found no difficulty in meeting the obligations of their depositors. But when the borrowers began to delay inordinately, the Chettiars found it difficult to meet their obligations and slowly gave up the system of taking deposits. Enquiry in Devacottah has shown that the Chettiars take deposits only occasionally; even then, deposits are taken only from persons known to them and from their relations, who hold positions in the social sphere. The rate of interest herein differs from the rate of interest on loans. The one reason for their inability to take deposits is due to the fact that they always entertain a genuine fear, unlike joint stock banks, with regard to conditions of payment and the impossibility of keeping the necessary fluid resources.

The deposits of Chettiars are of two kinds—(1) the current deposit in which the 'Nadappu' rate of interest is allowed (2) the 'thavanai' deposit, that is loans repayable after a definite 'thavanai' or period of rest. The period is two months in Madras and Burma and three months, six months or one year in the Federated Malaya States and Ceylon. If the 'thavanai' deposit is not demanded after the expiry of rest, interest is added after completion of each period of 'thavanai.'

The Chettiars adopt a current rate of interest analogous to the Imperial Bank Rate and fix it every Tamil month at each of the important centres—Madras, Rangoon, Singapore, Penang and Colombo—at a meeting of the leading Chettiar bankers. The dealings between Chettiars themselves are governed by the current rate of interest. These rates are much higher than those of the Joint Stock banks. The rates charged on 'thavanai' or fixed deposits are called 'thayanai' rates of interest. "The relation between parties in a thavanai transaction is that of a lender and borrower, the loan is made for a fixed and certain period of two months at a rate of interest which is fixed weekly by members of the chetti community for transactions which may be entered into during the ensuing week; the lender cannot demand repayment before the end of two

months for which he has lent the money; if he does not demand it at such time and the borrower does not elect to repay it, the loan is deemed to be extended for another full two months at the rate of interest fixed by the weekly meeting of the community for the then period and so on until the money is repaid." Thus the thavanai deposits have continued in Nattukkottai Chetti accounts for a number of years. As regards 'thavanai' rates, Rangoon 'thavanai' rates are fixed for each week, while the F.M.S. 'thavanai' rate is a matter for settlement by the parties concerned in each individual case. Thus there is no fixed rate for deposits as in Joint Stock banks.

LOANS.

It is generally said that the indigenous bankers lend only indirectly to agriculturists-i.c., the village moneylenders but finance trade and industry directly. This is true of the Multanis, Marwaris and the Kalladaikurichi Brahmins. They finance a considerable portion of the inland trade on the personal credit of the merchants, who in turn give loans to ryots. They also advance on produce and discount hundis. But the Nattukkottai Chettis lend to agriculturists direct and also finance trade and industry. The Assistant Commissioner of Income-Tax, Madura, in his evidence to the Madras Banking Enquiry Committee said "It cannot be said that in South India the Nattukkottai Chetti class of money lenders assist in any specific manner the agricultural or trade enterprise. The needy and the poor go to them for loans and if the borrower happens to be an agriculturist, in that sense the Chetti finances agriculture; or if he be a trader or shop keeper in that sense alone the Chetti finances trade. There is no system followed by Chettis to help agriculture or trade as a profession in the Presidency, although in Burma Agricultural enterprise is backed up by Chetti finance." But enquiry at Devacottah and Coimbatore has revealed that in nine cases out of ten, the Chettiars lend to agriculturists. About 10% of the borrowers are traders. That industry also is financed by these bankers is true from the fact that many cotton spinning and weaving mills in the Coimbatore District have as their managing agents Chetti bankers.

The Chettiars have no set of rules or regulations in common for being followed in the matter of loans. They study the condition of borrowers carefully and this they are able to do because they are in close proximity to the borrowers From the enquiry it is found that their methods of lending are as various as those of money-lenders.

In the case of the agriculturists as in the case of all others, the bankers lend most commonly large sums of money by means of pronotes which form the primary credit instruments. There are printed forms of promissory notes in Tamil and the borrower fills up the form and signs across the revenue stamp affixed to the pronote at the right end. No specific period of return is found in the pronote but 'thavanai' (the period of rest) is noted down. Generally 'thavanais' are for one year or half-year for purposes of calculating compound interest. Sometimes two or three persons jointly execute the bond. If after repeated persuasion by the banker the debtor does not return the loan, the former files a suit in a court of law. Usually the agriculturist borrows in these parts—Coimbatore and Devacottah as in other parts of the Presidency in the months of Adi (16th July to 15th August) to Masi (16th February to 15th March). The returning of loans is from Panguni to Ani or 16th March to 15th July. Agricultural operations—ploughing, sowing and harvesting-take place between July and

February and afterwards the marketing of crops is financed by the bankers. The Tinnevelly bazaar rate of interest which prevails in respect of transactions between one banker and another will be interesting if studied in connection with the period of loans given to agriculturists. The bankers in that district deal mainly with traders and the fluctuations in the rate of interest will show the stringency of the money market for traders.

The particulars of Tinnevelly bazaar rates are as follows:—

Tamil M	Iont!	h.	Corresp	ondi	ng E	nglish	Month.	R	ate of	Inte	erest.
Avani		16th	August	to	15th	Sept.		11	Annas	or	8¼%
Purattasi		,,	Sep.	to	,,	Oct.		9	,,	or	6¼%
Arpisi		,,	Oct.	to	,,	Nov.		8	,,	or	6%
Karthigai		,,	Nov.	to	,,	Dec.		8	,,	or	6%
Margali		,,	Dec.	to	,,	Jany.		11	,,	or	8¼%
Thai		,,	Jany.	to	,,	Feby.		14	"	or	101/2%
Masi		"	Feby.	to	,,	March		1	Rupee	or	12%
Panguni		"	March	to	,,	April		1	,,	or	12%
Chitrai		,,	April	to	,,	May		1	,,	or	12%
Vaikasi		,,	May	to	,,	June		14	Annas	or	$10\frac{1}{2}\%$
Ani		"	June	to	,,	July		13	,,	or	$9\frac{3}{4}\%$
Adi		,,	July	to	,,	Augus	t	12	,,	or	9%

^{*}Madras Banking Enquiry Committee Evidence Vol. III, p. 1164.

During 16th December to 15th January, the rate of interest to traders begins to rise and the highest rate to traders is during the period of Masi, Panguni and Chitrai when the agriculturists do not require any credit for their agricultural operations.

The pronote on personal security is the most-common method of lending to agriculturists. Some Nattukkottai Chettiars lend money on what is known as the kandu kist,

or thandal system. Only small money lenders resort to this system. When money is lent out, interest is taken in advance and the borrower pays in equated instalments daily or monthly. Default entails the payment of penal rate of interest. The Devacottah and Coimbatore bankers say that agriculturists borrow on this system. But as the agriculturist gets his income in a lump at a certain period of the year, it will not be possible for him to pay the instalments daily or monthly easily. This system of kandu loans will be very helpful to small traders.

Next to the pronote, the most common method of lending is the raising of loans on produce like rice or paddy, tobacco leaves and cotton. If on the stipulated date the money is not returned the banker persuades the agriculturist to sell the produce in his custody on that day at the market price and pay back the loan. Sometimes the banker himself sells the produce and claims from the agriculturist the margin, if any, left over.

A still another method of lending which is not so common is what is known as 'pokkiam' or 'othi' by which money is lent out on the security of lands or any other immovable property in lieu of which the banker enjoys the benefits of possession of property till the money is returned or till a maximum period of sixty years. If after sixty years money is not returned, the property automatically becomes the banker's when sued in a court of law. These are the different types of loans prevalent among Nattukkottai Chettiars in the Coimbatore District and in and around Devacottah.

True to the traditions of the great Nattukkottai Nagarathar families, the Rajah Sahib of Chettinad started, very early in life, his individual banking business under the

name and style of "S.Rm. M.A." It grew in importance and in a short time expanded into a number of branches.

As in the case of his charities, here also he turned from the beaten track and to secure efficient control and management, he converted his firms into Limited Companies. In the course of the past ten years, a number of trading concerns have been built up through his instrumentality which are all in a very flourishing condition. These are the Bank of Chettinad Ltd., The Chettinad Bank Ltd., the Chettinad Corporation Ltd., South India Corporation, Ltd., South India Corporation (Madras), Ltd., Madura South India Corporation, Ltd., Burma Commercial Corporation, Ltd. and Trichy and Tanjore Stores, Ltd. These have 60 and more branches and are scattered all over Indo-China, Malaya, Straits, Ceylon, Burma, British India and the Native States. These are all handling a large volume of business and are successfully run.

The Bank of Chettinad and the Chettinad Bank, besides their banking business, own about 100,000 acres of paddy lands in Burma and extensive rubber and coconut estates in Ceylon and Malaya.

The Rajah Saheb owns several villages in South India, the chief of which are an estate consisting of 116 villages called the Chettinad Estate in the Chittoor District and several villages in the Tamil Districts.

ANNAMALAI UNIVERSITY HOSPITAL

By

Dr. N. Rajaram, Medical Officer.

The problem of medical aid in Annamalainagar began when the Minakshi College, the nucleus of the Annamalai University, shifted to its own building, the Arts Block, from the premises of the Ramaswami Chettiar's Town High School, Chidambaram, in 1923. About a hundred students and four members of the staff came into residence in tempoimprovised structures. Communication with rarily Chidambaram was not easy, and the place itself was a sandy wilderness with palm trees and prickly pear small groups of huts. The Rajah Saheb. solicitude for the welfare with his usual students tackled the problem of medical aid to the residents of Annamalainagar by establishing a small dispensary in one of the rooms with a part-time medical officer and a compounder. The Sub-Assistant Surgeon and Compounder of the Town Hospital visited the dispensary thrice a week. They were also available for urgent calls.

The strength of the College grew by leaps and bounds; and the number of residents grew consequently; the more so as proper accommodation in the Hostel became available. The part-time arrangements were found to be inadequate and the dispensary was placed on a permanent basis in 1926 with a full-time Medical Officer, Compounder, attender and menials. The accommodation

was also increased by annexing another room for the increasing store of medicines.

Successive medical inspections of the College and the University revealed that in a very large proportion of cases the students had defects in the eye, the organ of which they should take the greatest care. To be of real help to the students, the University deputed the Medical Officer for training in the Minto Opthalmic Hospital at Bangalore in 1931. It then became necessary to increase the accommodation and equipment by providing a dark-room and dark-room equipment. Successive annual reports show that these have been put to good use.

With the rapid increase in the strength of the University and as the University became more and more residential, the need for a good Hospital with provision for accommodating in-patients began to be felt. The authorities readily made arrangements for erecting a building for the purpose and the present Hospital building with accommodation for four in-patients and an isolation ward was completed and occupied in September, 1936. The equipment was increased by a grant of Rs. 2,000. To cope with the additional work arising out of increased facilities the staff was increased by taking in another compounder, one more ward-boy and more menials.

With the admission of women students into the University and the starting of a women Students' Hostel, the need for a Lady Assistant to help the Medical Officer was felt. With the increasing number of the women students the need became greater and in 1940 a midwife was appointed so that she might be useful to the ladies of the locality and took charge in June 1941.

The daily dispensing is mostly for minor ailments such as disorders of the digestive organs, influenza, middle-car-diseases, tonsilitis, eye-troubles, wounds and bruises. Cases of pneumonia, fractures and dislocations come in occasionally for treatment. The table below gives the annual attendance at the dispensary during the several years and may give some idea of the benefit rendered.

TABLE A.

Year.	In-patients.	Out-patients.
1940.	59	14,422.
1939.	52	12,985.
1938.	-	12,811
1937.	-	14,486
1936.		12,151

It may also be mentioned that ever since its inception the dispensary has been useful not only to the residents of Annamalainagar, but also to the inhabitants of the large number of villages all round. And all this medical aid is given free of cost to everyone.

TAMIL CULTURE

By

RAO BAHADUR C. M. RAMACHANDRA CHETTIAR, B.A., B.L., Commissioner, H. R. E. Board, Madras.

The culture attained by a nation is gauged by the civilisation which it has attained from the past. It is not the production of a single day's work but is one which has been built up step by step by a slow and steady development of thought by its prominent sons. It has been preserved in the literature and arts of the country in the customs and manners of its folk and has been nurtured by its educational institutions founded by its people. Educational institutions of pre-eminence are known as Universities in Modern parlance. Universities in the West are the outcome of a few centuries. But their development and expansion have been quick and all-embracing especially during the past one century. In the East, University education has been a matter of ancient times, a heritage of centuries. The Universities of Nalanda and Taxila are world renowned, but political eruptions have over-flowed and submerged them under their irresistible lava of repression. But culture did not die having been nurtured in the minds of the humble country folk and of the un-ostentatious learned. South India was more fortunately situated and the ancient Tamil culture was preserved by the nature poets of the Sangam age and by the patronage of the enlightened imperial Cholas and Pandyas. After their fall, the holy seats of Saivaism, viz., the hoary maths, protected it from decline and at present the two eminent Universities, the

out-come of modern civilisation, have taken the burden of preserving our ancient heritage. In fact it is not only the ordinary duty, but its main function for a University to preserve the culture of a nation.

When the idea of a University was started about 85 years ago by the present Government their main object was the training of students to befit them as clerks and officers to run the affairs of the state. As ideas advanced further modifications had to be introduced. The original object merely required a system of examination of pupils to grade them according to their attainments for various posts in public service. Nobedy thought that culture had something to do with University education. Knowledge became wider and people felt a change in the angle of vision. The heritage of the nation ought not to have been cornered and screened in preference to foreign cultural ideas. research scholarships and professorial chairs were slowly introduced. At the beginning, chairs for foreign arts and sciences were preferred. With considerable difficulty and delay, vernacular culture was recognised and introduced. Readerships and studentships were established and a certain amount of work is supposed to be done in this line in the provincial University.

Tamil culture is great and its literature is vast. It had been hidden in the minds of a few scholars and preserved in the moth-eaten palm leaves hoarded in the nooks and corners of the thatched houses of the village teacher and in the dark niches of ancient maths. It had not reached really the study room of the modern educated scholar with its full import. There was an agitation in the country to place it on a pedestal worthy of it. When the premier merchant prince of Chettinad came forward to light the lamp of

culture near the Sacred Hall of Cosmic Dance, the Tamilians were overjoyed that the time had come when their dreams would be fulfilled. Massive buildings for dispensing learning amongst scholars arose and various subjects of real merit were taught. Students thronged and a full blown University sprang amidst green fields in the midst of sacred soil trodden by the holy feet of the four great Masters of Saivite culture. The people were immensely pleased.

Tamil was given a seat and Lecturers were appointed and a course of study was instituted. Art, Music and Teaching formed the various courses of study. But are they enough? One important branch of Tamil culture was entirely forgotten. Tamil had developed two aspects of life, secular and religious or philosophical. The secular aspect is represented by the Pandits and Annamalai as well as Madras have recognised and made sufficient provision for it with enough patronage. But what about the religious or philosophical aspect? Is it not high time for this aspect to be studied, preserved and developed?

Tamil has evolved a comprehensive system of philosophy known as Saiva Siddanta. The works of the four great Acharyas and of Tirumular give a very well developed system of philosophy equal to none in the land. They are far older than twelve centuries. In the 13th and 14th centuries of the Christian era various ideas enunciated by the ancient saints were codified by the Saint Meikanda Deva and his disciples. They have been consolidated into a series of 14 sacred works. Nobody till now has rendered their full import in English and other world wide languages except by way of a few essays by Dr. Pope and by late Nalluswami Pillai. Recently one or two treatises have

appeared in the shape of theses for University degrees by a few scholars.

It may be said that there is a chair for philosophy at the University of Madras and Saiva Siddanta being one aspect of philosophy, could be very well studied there. Those who know the real greatness of the system of Saiva Siddanta can understand what sort of treatment could be given to it at the hands of a chair which has specialised in Vedantism and allied subjects. True there is a syllabus prescribed by the University for Saiva Siddanta. But it must be noted that till now, no college in the Presidency of Madras has undertaken to prepare students for the examination in that subject. There are not enough teachers to teach the subjects since no encouragement has been shown to it till now. If such be the case, is it not necessary to put forward a strong case for the study of this important subject and to press for establishment of a separate chair for it with the object of introducing study and research work therein?

The Translation of various treatises on philosophy into English, the writing of thoughtful articles, and the devotion of a portion of the University journal for this study are some of the necessary acts to be undertaken at once. A chair, a readership and a few studentships should be created without loss of delay. The only University which can undertake this work is the Annamalai University since it is wedded to nurture the culture of the Tamilians. We hope that the Rajah Saheb the Founder of the University will bestow his serious thought on the subject and will give a practical turn to it thereby earning the praise and the gratitude of his loving compatriots.

MODERN TENDENCIES IN TAMIL LITERATURE

By

M. S. RAMANUJAM, B.A., (Hons.)

The 19th century died away with its trail ablaze. The political complacency of Britain received its first rude shock and in the twilight was seen the hum of a new life. The long lull of supine inaction in Tamil literature began its downward march, and in the short spell it saw the birth of new veterans, the growth of people into their full stature. The political subordination of India to the British. regarding its cultural aspect, was a blessing in disguise. Earnest savants of English birth and origin scintillated on the Tamil sky and Tamil literature shall always bear the long furrows made by their powerful plough. Dr. Pope and Bishop Caldwell. The birth and growth of a new science, the Dravidian philology, proclaims in mute eloquence, to the Tamils and the rest, the incalculable worth of their indefatigable endeavours for Tamil learning and culture: needless to embark on a cataloguing of their activities, magnificent and beautiful.

The long streaks of the rosy dawn broke on us with a golden promise and the literature of our language stood on the throes of a new birth. The frigid cold of an extended monotony was sought to be substituted with the fragrant blossoms of a new spring and thus proceed our language for 'fresh honours and pastures new.'

Modern Tamil literature, with its many offshoots, though not without signs of hope and promise yet betrays

long lines on her face, signs of senility and stagnation. Theories, really are they opinions, of varied hue, more novel than useful have been propounded. They contain, no doubt some grains of truth amidst sandy waste, but yet they are not un-alloyed. A clear picture of the currents and cross-currents in Tamil literature is as opportune as it is necessary.

The history of Tamil Renaissance, must really be begun with Professor Sundaram Pillai, the author of "Manonmaniam," a Tamil "literature" drama. The morning star of the Revival, with his unerring instinct and deep intuition to sense the charge of the atmosphere, had mingled in his product both the old order and the new, silently leading us to the threshold of the New Dawn. We feel not the change he is working; the deliberate employment of the old meter deludes us of his new spirit, "the spirit of revolution." It is deep enough; he had poured the new wine into the old "Manonmaniam" is but the properly punctuated bottle. warning of the imminent ebullition of a new spirit, the flowering of a fresh manhood. Sri Subramania Bharathi, the poet of national awakening, who came close on his heels, took up the trail and our literature has become a ferment of confused changes. The impetuous youth in him had the better of him; and was but too ready with ever new suggestions and ideals; and their velocity and volume refused to be bound within necessary literary limits. had not been partly responsible for the beautiful confusion in our literature. Political pressure, visionary ideals unceasing anxieties left his thoughts in a wilderness only to be scattered, unsettled and riotous. His was the riotous license of a prodigal son rather than the mellowed liberation of a soaring poet. A careful and unbiassed, detached and critical study of his poem is bound to reveal the progressive mellowing of his intellect and some of his early songs do no little violence to Tamil literary forms. They look like scattered rubies over a field (cf. his viruthams and venbas are no more than puerile versifications). His "Kannan Pattu"—not the whole but the majority, has found proper haven. Some of them have attractive forms and arresting ideas, touching the very fringes of the sublime. Students of Modern Tamil literature, in their impatience for things novel, too often err on the side of indiscriminate generalisations; for them the parts are the whole. Instead of a scrupulous analysis, they view them as an amalgam and grievously falter; in the midst of the wood they fail to see the trees.

After Bharathi, Mr. Desikavinayakam Pillai of Putheri is the Tamil poet to be reckoned with in our literature. His is a valuable contribution to an atrophied literature like Modern Tamil. The significance of his poems lies not in the deluding transparency of his form and style, but deeper still. The fusion of the literary spirit with the commonfolk dignity; the endowment of the common intelligibility with a classic significance and cultured elegance; he has thus with extraordinary success, evolved out a useful literary compound. With Bharathi's literary morbidities and emotional excesses well chistled; the classic age, its rigidity hammered out, grammatical conventions relaxed, in its pristine elegance and pure; Sri Pillai's vivacious imagination flooding the field with his effulgent rays; these have made his poetry a regulated whole, where the parts harmonise into a simple and significant unity, presided over by a supreme imagination.1 "He recreates it and charges the

^{1.} Translations from the "Light of Asia" and Gitanjali and "The River"

fact itself with the Poet's own sense of ultimate values."² He feels largely and intensely, thus they smoothly flow in metric dance to merge into a general significance.

New patterns and textures have their attraction when produced by a mill and the mind of an artist as well. The new-found glamour blinds lovers into a sense of security and self-love. This promiscuous propensity has been responsible for the birth of a few heresies in the Tamil literature.

The heresy that matter is superior to the manner of self-expression has not outgrown the stage of profuse polemics. For either side the protagonists are not wanting. There is also a liberal school of thought that strives to strike a golden mean. Agreed as it is, it is idle to deny the importance of form in literature as elsewhere. Do we not find it a distinct pleasure, intellectually apprehended when we quote a stanza from Kamban? Compare this mental state with the frame of mind when we express Kamban's idea not in Kamban's verbal form, but in our own language. The difference in the effect is understandable. To be succinct, form is not a non-existing abstraction, but an integral abstraction that inheres in the poem as such.

Another heresy, too common with us, is simplicity of style. The heresy of simplicity is being overdone. It is in "imperceptible blending the of the plain the ornate that a great writer is distinguish-He uses the simplest phrases without triviality, and the grandest without a suggestion of grandiloquence." "Without overflowing full" is the law of simplicity, and plainness does not mean frugality but unity. Intelligibility

2. Abercrombie: Epic. p. 54.

is an attribute of simplicity and intelligibility in literature is different from apprehension in journalism. The two offices differ in their material operation. In literature anything of worth shall be intellectually apprehended to live the piece and be in the spell, while Journalism does not share these elegant literary manners. Literature, in as much as it is refined thought, is, by its very nature, precluded from making a common cause with the public prophylactics-journals-which are incapable of being worked up to those ecstatic regions of intellectual and imaginative spring.

With the rapid march of political events an idea has been set afoot that political education—an euphemism of high danger in itself—could be easily had if a standardisation could be achieved in the field of letters; something like a socialistic doctrine, but applied for a different purpose; a case of political theory tried in literature. going too deep into this 'standardisation' fever, we cannot but be amazed at the sponsors of the idea. It is really a brain-wave. In literature the instruments of operations are too delicate and subtle things, but never brittle. "Words are not like iron and wood, coal and water, invariable in their properties calculable in their effect. Thev are mutable in their powers deriving force subtle variations of force from very trifling change of position; colouring and coloured by the words which precede and succeed; significant or insignificant from the powers of rhythm and cadence." The form of matter is the form of thought and the thought is mutable with the change in the subject-matter. Description varies from narration and the differentia is not supererogatory but suffi-

3. G. H. Lewe: Success in Literature, p. 135.

ciently essential. "What are we to say to a man who spends a quarter's income on a diamond pin which he sticks in a greasy cravat? A man who calls public attention on him and appears in a slovenly undress." This standardisation is bound to bring things to a dead level, which is neither proper nor preferable. Style is the man and the variety is but the irrefutable assertion of Nature wedded to beauty against the artificiality of mortal exertions towards a dead uniformity.

The realistic school is the counterpart of the romantic school in English literature. This school maintains with little consistency that anything in literature must correspond to the actual and real in nature. This, obviously untenable, is the upshot; of a comprehensive ignorance of the connotation of the term "Realism" as applied in matters literary. Realism and intelligibility in literature almost point at the same. Anything intellectually lived, felt and enjoyed is a literary reality. We delect in Ilango's portrayal of Kannagi and the burning of the beautiful city of Madura. True, the emanation of the God of fire and his implicit obedience to Kannagi are what we may call supernatural. All the same we feel we are not in a strange world when we skip over "Cilappathikaram." The genius of the poet weaves into the body of his poem a strange element, but in the high voltage of his imagination it turns into a real light, contributing to the general significance. This realism as apprehended imaginatively, sends a thrill into our being; we pulsate with a new life of appreciation and pleasure; we spring into regions of ecstacy and sublimity where life is a smooth-flowing stream of sweet dreams and lovely ideals; it is a dateless world.

4. Ibid., p. 125.

Yet another controversy that has succeeded in generating more heat is the question of language and dialect. The confusion of the distinct departments of these two has led to strange notions about style. The impropriety of raking up the dialect to the sanctimonious pedestal of a language is a sure sign of its decaying manhood. The development of the Malayalam language provides us with the needed corrective. Before the 10th century A.D. Malayalam language was not born. The language of the Cheranadu was Tamil, and by the passage of time, the local dialect of Tamil had grown into a distinct language. Thus a long sweep of land had been seceded to Malayalam, and Tamil had been harnessed to a tiny corner. This historical aspect must be truly grasped by Tamil critics.

The historical sense has been sorely neglected to the disadvantage of all. South Indian history, till very recently, had been but an anomalous heap of disjoined speculations. Thanks to the untiring efforts of Prof. P. T. Srinivasa Iyengar and Dr. S. K. Ayvangar, the ice is slowly giving way. The want of an historical sensibility has been the cause of too many wrong notions. The reactions of unbridled activities in English literature during the days of the Reformation, to the utter disregard of the past, are well-worth noting. "The worst of Renaissance, as of any great general movement, was that ideas were taken up by people who did not understand them. 'But one hath seen and all the blind will see.' And the blind and the deaf went on happily composing arguments about imagination and poetry: so that before long in a century or two from the beginning of the revival of learning, poets were hampered, not by the ancients themselves, but by the doctrines about the ancients."5

5. K. P. Ker: Form and Style, pp. 195, 196.

Modern Tamil literature is an ocean of storms and eddies. Ideas, ever new, ever changing enter the portals of our language. Tamil is caught in the vortex of a struggle between the old and the new. People read more about literature than literature itself. They glean in their survey of alien literatures ideas often too attractive and novel and there is a strong impulse for their indiscriminate application into Tamil literature. Votaries of Sanskrit and other learning, writing of modern Tamil literature neglecting the peculiar genius of the Tamil language, are thinking not of poetry in Tamil, but of such English or Sanskrit poetry as was written by Shakespeare or Kalidasa and the conflict of ideas and emotions continue, leading us nowhere.

The absence and the presence of imagination makes all the difference between a good and a bad literature. Well may the naturalistic school gloat on its religious conviction that literature must inevitably reflect and radiate the contemporary thoughts and movements, answering to the lines and tones seen in nature. Obviously they fail to reconcile their sense of frustration with the "higher realities" as squeezed into a poem—a poetic world, an imaginative sphere. This "righteous disdain" for thoughts not in tune with nature is partly a product of confused thought; a false identification of two distinct qualities. This qualitative confusion of imagination and exaggeration is responsible for this heresy "Not manipulation, but imaginative transfiguration of material; not invention but selection of existing material appropriate to his genius; and complete absorption into his being; that is how an artist works."6 Exaggeration is morbid and sickening. The poetic world

6. Abercrombie: Epic. p. 53.

BHAVABHUTI AND MIMAMSA

By

MIMAMSAKARATNA V. A. RAMASWAMI SASTRI, M.A., SIROMANI.

The identity of Bhavabhuti, the author of three plays in Sanskrit, with Bhattomveka, the commentator on Kumarila Bhatta's Slokavarttika and Mandanamisra's Bhavanaviveka, is still a disputed question among the students of Historico-literary Research in Sanskrit. A few scholars who are not in favour of this identity theory assert that Bhavabhuti is nowhere known as a Mimamsaka. It is proposed in this short paper to collect certain evidences from his dramas in order to show that Bhavabhuti is well-versed in the Purvamimamsa Sastra as he is in other Sastras—Vedanta, Nyaya, Vyakarana, Sankhya and Yoga.

In the prologues of the Uttararamacarita and Mahaviracarita Bhavabhuti speaks of his Sastraic attainments by the rare honorific epithet—প্রনাব্যমনাণ্য . It means that he is well-versed in the three Sastras— প্রয়াম — Vyakarana, নাৰ্থ্যাম — Mimamsa and সনাণ্যাম — Nyaya. This reference would prove that Bhavabhuti is a mastermind who has acquired high proficiency in the three important Sastras—Vyakarana, Mimamsa and Nyaya.

Again, Bhavabhuti makes mention of his Sastraic erudition in the verse found in the prologue of the Malatimadhava—

The utter disregard paid to the proper literary background, has been responsible not to a few inexactitudes in our literature. The indiscriminate application of the cannons of western literary thought to our literature, without a correct appreciation and deep acknowledgement of the native genius of Tamil. corrodes this cherished progress ever more. Literary, unity and respect for native forms, with progressive but reasonable modification, in tune with its genius, the recognition of a literary Tamil, evolved out of the fusion of the classic and modern language, as apart from the language too often indulged in by the Tamil journals—these aspects need engage the ardent contemplation of every true Tamil lover and scholar. This done, the first flesh of a dim dawn shall soon break into a broad day light.

9. Tagore: Reminiscences, pp. 183, 184.

BHAVABHUTI AND MIMAMSA

By

MIMAMSAKARATNA V. A. RAMASWAMI SASTRI, M.A., SIROMANI.

The identity of Bhavabhuti, the author of three plays in Sanskrit, with Bhattomveka, the commentator on Kumarila Bhatta's Slokavarttika and Mandanamisra's Bhavanaviveka, is still a disputed question among the students of Historico-literary Research in Sanskrit. A few scholars who are not in favour of this identity theory assert that Bhavabhuti is nowhere known as a Mimamsaka. It is proposed in this short paper to collect certain evidences from his dramas in order to show that Bhavabhuti is well-versed in the Purvamimamsa Sastra as he is in other Sastras—Vedanta, Nyaya, Vyakarana, Sankhya and Yoga.

In the prologues of the Uttararamacarita and Mahaviracarita Bhavabhuti speaks of his Sastraic attainments by the rare honorific epithet—প্রবাবস্থান্য . It means that he is well-versed in the three Sastras— প্রয়াম — Vyakarana, বাৰ্য্যাম — Mimamsa and স্মাণ্যাম — Nyaya. This reference would prove that Bhavabhuti is a mastermind who has acquired high proficiency in the three important Sastras—Vyakarana, Mimamsa and Nyaya.

Again, Bhavabhuti makes mention of his Sastraic erudition in the verse found in the prologue of the Malatimadhava—

" यद्वेदाध्ययनं तथोगनिषदां सांख्यस्य योगस्य च ज्ञानं तत्कथनेन नैव कथितः कश्चिद्गुणो नाटके॥"

He asserts that any powerful display of his knowledge of the Vedas, the Upanisads, the Sankhya and Yoga systems in a drama would not contribute to its success. thereby implying that he is well-versed in all these branches of learning but that he is not going to display his Sastraic knowledge in his play. The term Vedadhyayanam in the verse is worth our consideration. It does not mean merely the memorisation of the Vedic texts, but a critical and exhaustive study under a guru with the help of six Vedangas and the Purvamimamsa Sastra, as 'उपनिषट । ज्ञानम्' would mean the knowledge of the Upanisads or the Upanisadic teaching with the help of the *Uttaramimamsa Sastra*, popularly known as the Vedanta Sastra. The correct understanding of the Vedic and Upanisadic texts would be possible only if the Vedic student studies these two Mimamsa Sastras properly. So says Kumarilabhatta about the indispensable nature of the study of the Purvamimamsa Sastra by a Vedic student-

" धर्मे प्रमोयमाणे हि वेदेन करणात्मना । इतिकर्तव्यताभागं मीमांसा पूरियव्यति ॥"

The true knowledge of dharma is arrived at by the study of the Vedas with the help of its chief accessory—Mimamsa Sastra. While speaking of the scope and nature of tarka in the first Nyayasutra, Vacaspatimisra, in his Nyayavaritikatatparyatika, extolls the Mimamsa Sastra to the high rank of the Vedas on the ground that it helps the Vedic student to a great extent for properly understanding them—

'निश्चयाय तु प्रवर्तमानं प्रमाणं तद्विषयविवेकेनानुगृह्धत् इतिकर्तव्यतात्वे-नोपयुज्यते इति । यथोक्तम्—

> " मीमांसासंज्ञकस्तर्कः सर्वेवेदसमुद्भवः । सोऽतो वेदो रुमाप्राप्तकाष्टादिलवणात्मवत् ॥

The first sutra 'अथातो धर्मजिज्ञासा' in the Purvamimamsa Sastra emphasizes the fact that the Vedic student should not leave the residence of his teacher soon after his study of the Vedas without the study of the Purvanimansa Sastra. He understands no doubt, with the help of the Vedangas, the meaning of those texts in which there is no ambiguity or room for any discussion, but in instances which admit of more than one interpretation he has to resort to the help of the Purvamimamsa Sastra which removes his doubt by correctly interpreting the passage in question on the basis of certain well-accepted rules of interpretation. This is the signal service that this Sastra renders to the Vedic student who, after returning home from his teacher's residence, is expected to marry and perform the duties of a true householder with a correct understanding of their nature and significance with the help of the Purvamimamsa Sastra. The sutra ' अथात धमजिलासा' literally means that the Vedic student after understanding the Vedic contents in a general manner with the help of the Vedangas, the study of the Vedas being intended for the correct knowledge of the Vedic contents, has to stay at the residence of his teacher to investigate the dharma—the chief import of the Vedas—by means of wellestablished rules of interpretation.

अथ=वेदाध्ययनानन्तरम्; अतः=अध्ययनस्यार्थज्ञानहेतुत्वाद्धेतोः, धर्मजिज्ञासा= धर्मविचारः कर्तव्यः---गुरुकुलान्मा समावर्तिष्ट यावद्वेदार्थविचार अवसितः स्यात् । • This fact explains well that the study of the Purvamimamsa Sastra formed in ancient India an integral part of the Vedic study; and it is no wonder that Bhavabhuti who claimed birth in the family of great Somapithins and pancagnis studied the Vedas and that his Vedic study would not have been complete without the study of the Purvamimamsa Sastra.

The description of his ancestors found in the prologues of the *Malatimadhava* and the *Mahaviracarita*¹ clearly indicates that Bhavabhuti has inherited high traditions of Vedic scholarship and practice of the Vedic sacrifices, references to which are found in abundance in his dramas. Dr. A. B. Keith has already collected and published some of them in the J.R.A.S. (1914) in a short paper with the title 'Bhavabhuti and the Veda.' The following instances taken from his dramas would give additional weight to the view that Bhavabhuti is a great scholar in the Vedas, the study of which he would have completed with the study of the Purvamimamsa Sastra, as indicated above.

1. अस्ति दक्षिणापथे पद्मपुरं नाम नगरम् । तत्र केचित्तेरियाः काश्यपाः चरणग्ररवः पङ्क्तिपावनाः पश्चामयः धृतवताः सोमपीथिनः उदुम्बरनामानो ब्रह्मवादिनः प्रतिवसन्ति । तदापुष्यायणस्य तत्रमवतो वाजपेययाजिनो महाकवेः पश्चमः सुगृहीतनाम्नो भट्टगोपालस्य पीत्रः, पवित्रकीर्तेनीलकण्डस्यात्मसम्भवः श्रीकण्ठपदलाञ्चनः पदवाक्यप्रमाणज्ञो भवभूतिनीम जातुकर्णी-पुत्रः कविमित्रधेयमस्माकमिति भवन्तो विद्रोकुर्वन्तु ।

श्रेष्ठः परमहंसानां महर्षीणां यथाङ्गिराः । यथार्थनामा मगवान्यस्य ज्ञाननिधिग्रेरः ॥ (M. V. Carita, Prologue).

अस्ति दक्षिणापथे विदर्भेषु पद्मपुरं नाम नगरम् । तत्र केचित्तेतिरीयिणः काद्यपाश्चरणग्रस्य पङ्क्तिपावनाः पश्चाग्नयो चृतवताः सोमपीथिनः उदुम्बरनामानो ब्रह्मवादिनः प्रतिवर्सान्त ।

ते श्रोत्रियास्तत्त्विनिश्चयाय भूरि श्रुतं शाश्वतमाद्रियन्ते ।
इष्टाय पूर्वाय च कर्मणेऽर्थान्दारानपत्थाय तपोऽर्थमायुः ॥
तदापुःयायणस्य (Malatimadhava, Prologue).

(1) किन्त्वनुष्ठानित्यत्वं स्वातन्त्र्यमपकर्षति । सङ्कटा ह्याहिताझीनां प्रत्यवायैर्गृहस्थता ॥ (U.R. Carita, I. 8 and M. V. Carita, IV. 33).

This Verse explains the well established truth in the the Purvamimamsa Sastra that a dvija householder is compelled to perform at any cost the nitya and naimittika karmas like Agnihotra and Uparagasnana in the prescribed time till his death, lest he should be liable to divine punishment.

(2) रामः—भवन्त एव जानन्ति— सर्वदोषानभिष्वङ्गादाम्नायसमतां गताः । युष्माकमभ्युपगमाः प्रमाणं पुण्यपापयोः ॥

(M. V. Carita I, 38).

When Rama was commanded by sage Visvamitra to kill Tataka he was hesitating to act since he believed that no woman should be killed under any circumstances. But when sage Visvamitra persisted in his demand, Rama took the opinion of the sage as final and acted accordingly. So this verse explains the great truth (established in the Purvamimamsa Sastra I. 3-3-4) that the opinion of a great man which is known by the term atmatushti (intuitive knowledge) is an authority on dharma just like the Vedas. Sage Visvamitra, according to Rama, is a high personage free from all human vices and his opinion is, therefore, an infalliable authority on dharma.

(3) रामः — अर्थवाद एवेषः, दोषं तु मे कथञ्चित्कथय येन प्रतिविधीयते (U. R. Carita, I. p. 42. N. S. Edn. 1911.)

Rama means by the term 'अर्थनाद' that the highly eulogistic statements of the citizens about his administration should not be taken in their literal sense though they

are intended as words of praise and compliment. It is established in the Purvamimamsa Sastra, (I. 2. 1) that the arthavada section in the Vedas should not be taken in its literal sense and that it mainly means the praise or condemnation of the thing enjoined or prohibited by the vidhi or nishedha vakya generally associated with the arthavada in question.

्र (4) रामः—अस्ति चेदानीमश्वमेधसहचारिणी मे । (U. R. Carita, III. p. 96).

Rama's remark (noted above) indicates what is established in the Purvamimamsa Sastra regarding the joint responsibility (adhikara) of the husband and wife in a sacrifice (VI. 1.) 'दम्परोस्सहाधिकारः' that neither the husband nor the wife can perform the sacrifice independently.

These references to the Mimamsa doctrines and others² to Vedic passages and sacrificial details abundantly found in the three dramas prove that Bhavabhuti is a man of high Vedic learning and culture which he could not have acquired but for his mastery over the Purvamimamsa Sastra. Would these references not be sufficient to show Bhavabhuti's leanings to Purvamimamsa Sastra?

- 2. (a) Vide the Uttararama Carita, (N. S. edition, 1911).
- (1) द्वादशवार्षिकं सत्रम् (p. 12).
- (2) अन्त्रेयी—तौ च भगतता + त्रयीविद्यामध्यापितौ (p. 53).
- (ठ) दण्डायन:--समांसो मध्यकै: + निवृत्तमांसस्तु तत्रभवान् जनक: । (p. 103).
- (4) आविर्भृतज्योतिषा + विष्छतार्था वदन्ति (p. 114).
- (5) अङ्गादङ्गात्सृत इव + आशसतीव । (p. 153).
 - (b) Vide the Mahavira Carita, (N. S. edition, 1926).
- (6) अहल्या नाम + एनसी निरमुच्यत। (p. 20).
- (7) सन्दिष्टं च मैथिलराजवें(स्माभि:—आचार इति यजमानोऽपि यह्ने निमन्त्रितोऽसि।

VIDYA-DANA

By

RAO BAHADUR K. V. RANGASWAMI AIYANGAR.

The endowment of a great place of learning by a single munificent and far-sighted patron has been more common in the West than in India. The great Colleges in Oxford and Cambridge and some of the more important universities in the United States sprang from individual donations, and appropriately bear the names of their benefactors. In India we have had in modern times only two instances of such foundations, both of which owe their being to the enlightened liberality of two merchant princes, J. N. Tata and the Rajah of Chettinad. The aim of the Indian Institute of Science is narrower than that of the Annamalai University. The Institute stands for applied science so far as it relates to India's economic uplift. The Rajah's institution, on the other hand, is a University, dedicated to learning in all its aspects, and is not a mere research institute specialising in applied science. The wider support from the state, which these have received after they were brought into existence, cannot take away from the honour due to the wise founders for providing them.

In some other respects also the two institutions differ. The driving motive of J. N. Tata was to devise a powerful accessory for India's industrial progress. The Tata Institute's aim is severely practical. Pure science and knowledge for its own sake are out of the picture. Work is entirely post-graduate. Instruction is subordinated to in-

vestigation. It is otherwise with the Annamalai University. It has had within its programmes provision, as funds allow, for applied science, and such subjects as oil-chemistry and sugar research have been suggested in schemes for an extension of its activities. Primarily it is dedicated to knowledge for its own sake, with such adjustments of aim as are necessitated by environment and the principle of division of labour among universities. Even when through the pressure of financial restriction, some branches have had to "axed," the development of the University on individual lines, in which it can supplement the work of other universities, is receiving consideration. Its bias is to conserve a special culture, which has a claim on it geographically and historically. The location of the two academies has been dictated by considerations which differ widely and reflect the differing outlook of their respective founders. For the Institute of Science any place, which possessed a suitable climate and access to industrial potentialities was good enough. To the new University for the Tamil districts, which Rajah Sir Annamalai Chettiar of Chettinad provided, a location, sanctified by tradition and religion was essential. It is noteworthy that the first locality to be considered was Madura, which possesses both in an eminent degree, and Chidambaram was finally selected, because it runs Madura close in these respects. Devout Hindu as he is, the Rajah of Chettinad has been true to Indian sentiment in attaching the new educational foundation for which he became responsible to a famous tirtha and temple.

For many centuries Indian practice made the teacher the centre of educational activity. It was not a place but a teacher that attracted pupils. Sometimes, many eminent teachers, each of whom will be an attraction to myriads of students, gathered together in a single locality,

drawn to it by its pious associations. This was so in Kasi (Benares). It has remained till to-day, the most eminent centre of Hindu learning, because every great Hindu teacher desires to live in its holy area, and most Hindus, learned or unlearned, cherish the wish to drop their mortal coil within its bounds. When Lord Cornwallis desired, after the provinces of Karra and Allahabad had been acquired by the East India Company, from the Emperor to show the people of Hindusthan that the new power was animated by sympathy for her religions and cultures, he accepted the advice of Jonathan Duncan, the Resident at Benares, to found in the holy city a great Sanskrit College. It was to be under the special charge of the Governor-General-in-Council, who would display their interest in its work by reviewing its activities every year and making all its staff appointments themselves. It is also noteworthy, as characteristic of the Indian way of thinking, that for many years hardly any eminent teachers in Kasi could be found to undertake teaching in the new Sanskrit College, which was so powerfully supported by the Government. At last a modus vivendi was discovered by allowing the professors to impart instruction in their own homes. In such conditions, the new institution was virtually equivalent to the endowment of individual teachers, which had been a necessary feature of a system in which the teachers taught without the expectation of fees, solely from a sense of high duty.

Such attractions as a sacred shrine or *tirtha* offers to teachers may be provided by capital towns of territories whose rulers wish to be known as patrons of learning. As "man is of all commodities the most difficult to move," it would happen that even after enlightened kings pass away,

the congregation of learned teachers in their capitals continues for a long time. In South India, Kancipura (Conjeevaram) enjoyed, from the congregation of sacred shrines of all Indian religions and sects within its ambit, in some measure the pre-eminent attraction of Kasi.

The monastery replaced the wandering teacher after Buddhism established itself. The primary duty of the Brahmana, according to Hindu varnasramadharma, was to teach. This obligation remained even when he entered the third and fourth stages of life (Vanaprastha and Sanyasa asrama). A learned ascetic will become a centre for the diffusion of learning, by attracting a host of disciples, who in their turn will become teachers. Books were essential to proper learning, even in epochs in which the cultivation of the human memory attained unheard of perfection. It would be more easy to collect them within one building than allow them to remain scattered in the possession of individual teachers. Thus, the monasteries which grew around Indian ascetics became in effect colleges of learning, perpetuating the teaching of the original sage, and preserving within their walls great collections of books. It was exceptional for a Hindu ascetic to possess, as the famous Kavindracarya did in the 17th century, A.D., a vast library, without being a member of a matha.

The formation of colleges in monastic institutions began with Buddhism. It possessed an organization in its monastic order, rules of discipline, and congregation (samgha) which enabled it to display features of permanence, so essential for the continued life of an educational centre. The earliest groups of scholars and teachers, with a fixed habitation, that we can find records of in India are

the Buddhist monks. Long before the advent of Buddhism, centres like Benares (which attracted Hindus from all over India) had Takshasila in the Gandhara country, (the meeting place of Hindu and foreign scholars on the frontier, as Peshawar to-day is the meeting place of merchants from within and without India) had congregations of scholars, some of whom resided permanently in the towns. Many famous personages were sent from distant places to study at Takshasila. When the restraining influence of the powerful empires which met near the Indian frontier on the north-west was withdrawn, and new hordes poured into the area and invaded India, Takshasila lost its pre-eminence. When Buddhism and Hinduism found homes over the seas, places not far away from ports of embarkation Tamralipti or Tamluk in the Ganges delta or Valabhi in Gujarat) became convenient localities where Indians of learning and acolytes from over the seas might come together. In South India, Kanci and Amaravati (near Bezwada) came to have such attractions. The famous Buddhist University of Nalanda, in which for ten centuries not only Buddhists but even Brahmanas studied, and the colleges of Valabhi came to distinction as university centres in view mainly of their proximity to sea ports. Once they had established their name, as homes of pious and learned activity, royal patronage came to their help. For royal patronage of Nalanda we have not only the testimony of the Chinese pilgrims, Hiuen Tsiang and I-tsing as well as Hwui Li the biographer of Hiuen Tsiang, but we have the evidence of the inscriptions. A hundred villages, and according to another account 200 villages, are said to have formed the permanent endowment of Nalanda. There were occasional gifts and supplementary endowments by rulers as well as ordinary persons, over and above the revenue

of the villages. The munificent donations of the Guptas were emulated by the powerful Pala kings. Vast buildings, of which detailed descriptions exist in the accounts of the Chinese pilgrims, were erected out of such gifts. Besides the viharas, Nalanda possessed a colossal library of manuscripts, which was a powerful attraction to the Chinese pilgrims who made such prolonged sojourns there. According to Tibetan accounts, the quarter in which the Nalanda University, with its grand library, was located was called the Dharmaganja (Piety Mart). "It consisted of three grand buildings called Ratnasagara, Ratnodadhi, and Ratnaranjaka respectively. In Ratnodadhi, which was nine-storeyed, there were the sacred scripts called Prajnaparamita-sutra, and Tantrik works like Samaja-guhya etc." (Vidyabhushan, Indian Logic, p. 516). The great university was not restricted to Buddhist studies; for. Hiuen Tsiang studied Brahmanic scriptures at Nalanda. One of its viharas was endowed for the continuance of Vedic offerings like bali and caru (Bosch, cited in Nilakanta Sastri's Nalanda, p. 175). The comprehensive nature of its studies is shown in an enumeration by Hiuen Tsiang's biographer: the classics of Mahayana and Hinayana, the texts of "the eighteen sects", the Vedas, logic (hetuvidya). grammar (sabda-vidya) medicine (cikitsa-vidya), works on magic (Atharva Veda) and the Samkhya. We are reminded that among the eighteen 'sippavidya' (silpa-vidya), which the Jatakas repeatedly say were taught at Takshasila were such subjects as medicine and surgery, astronomy and astrology, archery and military science, magic and divination, accountancy and commerce, and agriculture and cattle raising. (Altekar, Education in Ancient India, p. 254 for references).

The wealth of the library, its princely endowments and its sumptuous and numerous buildings were excelled by its numerical strength. The monks in residence are put at anything between 3000 and 5000, of whom about 1500 are represented as competent to expound the Buddhist scriptures. The number of pupils and acolytes must have been greater. The statement of Hiuen Tsiang (Records, p. 65) that the number of residents was 3000, must refer to the ordained monks only. It is probable that a considerable number of students found their food and clothing, as they now do in pilgrim centres like Benares, at choultries endowed by the laity in the adjacent town, or in private houses. As the royal donations were lavished, as usually they are, on buildings, it is evident, that with a traditional obligation to entertain all guests, the Abbot of Nalanda must have been hard put, with the endowments already named, to meet the expense of even a frugal fare for all the inmates, permanent and casual. But, this was quite in accord not only with monastic rules, but with the Hindu tradition of brahmacarya, which limited to ascetic fare those engaged in the search for knowledge.

In a vast country, a few centres of learning like Nalanda could not have met even a tithe of the educational needs of the population. They must have been met by the traditional gurukula system by which a guru (teacher) taught and shared his meagre fare with his disciples, without expectation of any return. To teach all he knew to a deserving pupil and to house and feed him were religious obligations of the Brahmanic teacher. The numbers of those who could be taught in colleges attached to Hindu and Buddhist monasteries, though very large, when individual institutions are considered, must have constituted but a small part of the number to be taught. The

demand was more than the universities and mathas could meet. It was therefore necessary to rely primarily on individual teachers, particularly on those grouped or gathered by accident or the lure of a tirtha or temple, in some famous city, or living by themselves at their homes, or moving about the country at the head of their pupils. wandering, teaching and engaging in public disputations, which often brought material recognition and reward to the teachers from which they met the expense of feeding their pupils. As such a way of life was open only to men, the opportunities for the education of women, when the education in the forest home became out of date, led to growing female illiteracy. The discontinuance of upanayana for girls, to whom according to certain smritis, it had been obligatory in the distant past (pura kalpa) was obviously due to the impossibility of maintaining it in spirit and letter. Village education, both primary and advanced, was provided for by endowed temples, mathas or viharas, or colonies of learned men (agrahara). Such colonies were a special form of endowment favoured by kings. As we may gather from the names of donees in grants forming agraharas, the beneficiaries were representative of different sakhas or branches of the Veda, and belonged to different gotras (septs). The object of the last provision was to provide for intermarriage within the agrahara or colony, so as to fix the inhabitants to it. When such colonies were distributed through a province, they served as well as schools do to-day.

The Hindu temple emerges in history as a place of education later than the Buddhist or Jain monastery. A trend began to manifest itself to regard the surplus income of well-endowed temples as lawfully available for educational purposes. The maintenance of pathasalas from temple funds

then began. It was also more convenient to make educational endowments in the first instance to a temple, as there was less likelihood, in an age of faith, of such funds being misappropriated than funds set apart for secular objects. A temple or a village community had also a continuity of life, which exceeded that of the oldest ruling dynasty. Hence, just as endowments for pious purposes used to be made over to village communities or village guilds, so endowments for education were also made to temples. The problem of buildings for lecture rooms and libraries was solved by using temple buildings. In Salotgi in Bijapur district, for example, the minister of the Rashtrakuta ruler Krishna III endowed in A.D. 945 a college for about 200 students, who, along with the teachers, were housed, clothed and fed from the income of the endowment. The College fell into ruin and was rebuilt by a pious and rich person some generations later. (Altekar, op. cit. pp. 284-285).

The endowment of the Sanskrit College at Ennayiram (Ashlasahasram) in South Arcot is now famous. Its details are disclosed in the South Indian Epigraphist's Report for 1918. As many as 340 students were provided for in this endowment, along with 16 teachers. primarily a Brahmana college teaching the Vedas. grammar, rhetoric, Mimamsa and Vedanta. We know of smaller pathasalas attached to temples like Tirumukkudal in Chingleput district (Epigraphia Indica, XXI, No. 185) with 60 students, and Tiruvottiyur (Rep. on S. I. Epigraphy, 1912, No. 212) with many more students. These accounts relate to endowments of which the records have been discovered by accident. The number of such foundations must have been very large. Their existence is not open to doubt, since none of the endowments which have survived claims to be unique.

The maintenance of both primary literacy and of higher learning was thus due firstly, to the obligation to teach laid on the first varna and to teach gratis; secondly to the obligation to learn laid on the first three varnas, a vocational bias being given to the studies of the second and third varnas; to devolving the duty of free teaching on grihasthas and sanuasins, both of whom were restricted in regard to the wealth they could own; to making pupillage ascetic in its discipline and way of life, so as to reduce its cost; to providing various means by which the hereditary teachers. who had to teach free and feed their pupils, might be remunerated indirectly or endowed, as by sacrificial fees. and religious gifts (dana); and lastly, to the endowment of monasteries and the foundation of colonies of householders (grihastha) who could both teach and perform sacrifices. By the Hindu code of life, a sanyasin could not own wealth, and a householder could not hoard more than what was just enough for three years' expense.

All asramas for the Brahmana were thus dedicated to spare living or poverty. If wealth came to him in any one of the asramas, it could neither be hoarded up nor used in luxurious living. It could only be expended for the benefit of others, i.e., those whom it was the duty of the Brahmana to teach free and feed free. One can appreciate, in the light of these rules, the injunctions of the smritis (lawbooks) giving the first varna alone the privilege or duty of accepting gifts of a pious nature (dana-pratigraha). The acceptance of a gift (dana) meant undertaking certain religious obligations which would purify the donor. Unless therefore the recipient of a gift had sufficient spiritual and personal merit, the acceptance will prove a spiritual drag on him. In works on Dharmasastra dealing with religious gifts much stress is therefore laid on the deter-

mination of the fitness or unfitness of the donee. A gift to an undeserving person will not only miss its mark by not getting for the donor the anticipated spiritual merit (punya) but it will bring him load of sin (papa). The burden of finding a deserving person is laid upon the donor himself. It is noteworthy that among the qualifications laid down in various smritis and puranas for a proper recipient of a gift, birth is only one. Learning and every type of virtue, must be possessed by the donee. According to Vasishtha-smriti (III, 11-12) "an elephant made of wood, a stag made of stuffed hide, and an unlearned Brahmana are only nominally what they appear to be. In any kingdom, if what is designed for the enjoyment of the learned is used up by the unlearned, there springs fear for the country and failure of the rains." The acceptance of a gift does not give the donee the power to make a bad use of it. According to a verse of Manu, cited by Lakshmidharain the Danakalpataru (p. 43 ed. Rangaswami) "the Brahmana, who, having the qualification for receiving a gift, receives but distributes it to the undeserving, to him nothing should (thereafter) be donated; and he who (having received a gift) merely hoards it (sancayam kurute) and does not put it to pious uses, will not attain ultimate happiness".

The result of the rules relating to gifts in the *smritis* is two-fold: it compels the affluent e.g., kings, wealthy officials and opulent merchants, to seek spiritual merit on various specified occasions in which a gift to a deserving learned and virtuous Brahmana leads to the acquisition of *punya* and the reduction of sin; and it also compels the recipients to use the gifts so obtained not for selfish enjoyment but for pious purposes and the fulfilment of duty as *srotriya*, i.e., performing yajnas, studying and teaching. The elabo-

rate rules defining the different types of gifts, as sixteen major gifts (mahadana) etc., and laying down minutely the numerous occasions on which the making of gifts is a duty or a privilege to the economically well-endowed, virtually leads to this, viz., provision of a wide stream of benefaction whose benefits accrue ultimately to students and acolytes. In this sense, all dana is really vidyadana, the gift of knowledge. The drift of all the smriti rules on the subject is to provide for the public support of free education, upto the highest standards possible. This is implicit in the entire dana literature, and it redeems it from aridity and ritualism. It is only those who view it superficially who will miss its purpose and regard it as a cunning device to make easy money for a privileged class.

Vidyadana is used in the Hindu smritis in another and narrower sense. In that sense, a large chapter is devoted to it in the Danakalpataru of Lakshmidhara, the learned guru and prime minister of King Govindacandra of Kanauj (A.D. 1109-1155). This chapter has been "borrowed" intact and reproduced with minor additions by later nibandhakarah (digest-writers) like Candesvara, Hemadri and Madanasimha.* The original work has hitherto been inavailable, and seems to have been so for centuries. In South India and the Dakhan, mediaeval rulers relied largely on Hemadri's Danakhanda (which is based on Lakshmidhara's) to justify or describe the value of their frequent pious donations. At one time, to make all the mahadanas (chief gifts) in accordance with Hemadri was declared in inscriptions to be a duty admitted

^{*}The works on Candasvara and Madanasimha are unpublished. I have used Mss. of these works in preparing my edition of Dana-Kalpataru.

as such by every Hindu king. The incidence of the performance of the "sixteen major gifts" or other minor gifts was always the same, till the spirit of the institution was lost, and gifts were made, as a matter of routine, to persons whose only qualification was birth, in the face of the specific and clear warnings against the dangers of making indiscriminate gifts, without making sure that the recipients possessed besides birth the requisite spiritual, mental and moral worth.

Vidya is explained in relation to the rules of gifts (danavakua) as both learning and books. Bhatta Nilakantha in his Danamayukha (ed. Chowkhamba, p. 244) classifies vidyadana as (1) the gift of books (pustakadana), (2) the gift of pictures or ikons (pratimadana) and (3) the gift of knowledge by teaching (adhyapanam). last is dealt with in our digests and smritis the duties of the members of the first varna. The second seems to refer to the gift of ikons of Vidya-devi or the goddess Sarasvati. Nilakantha himself deals in his very brief section (covering only a page as against a whole chapter of Lakshmidhara's Danakalpataru and fifty closely printed pages, pp. 492-542, of Hemadri's Danakhanda ed. Benares) with only the merit of giving away some kinds of books. The difference between the earlier and later writers is significant. The former wrote in epochs in which books, so necessary for the preservation and propagation of knowledge, were few and difficult to get, as compared with the heyday of the Mughal empire in which Nilakantha wrote. Lakshmidhara's eulogy of the value of great collections of books (i.e. manuscripts) will bring joy to modern bibliophils and librarians. The calligraphist is raised to a high social position. He is to be rewarded not only by gifts but with public marks of honor. The stylus, writing material, indelible

ink and the writing desk are all meticulously described, and with marked gusto. The completion of the transcription of a great book was to be celebrated as a public event, as the Italians of the Middle Ages used to celebrate in civic processions the painting of a Madonna by a painter of eminence like Cimabue.

Books become indispensable when the old methods of oral instruction, for several years continuously, by a single teacher, give place to instruction by several teachers, and a change of literary form which makes books less easy to memorise and to transmit orally. The multiplication of books, and reliance on books in preference to the old public disputations for the communication and publication of new knowledge, will also explain the increased stress laid on the gift of books not only to scholars and teachers, but to temples and mathas. The praise of the new type of vidya-dana is to be found in the later puranas and upapuranas, from which the citations in the digests are made. Even in such passage, the references to vidya are so worded as to suggest both instruction and aids to study in the way of books. The Mahabharata (Anusasana Parva, LXIX, 6, ed., Citrasala) lays down that he who utters (i.e., teaches) to a pupil the divine word (i.e. the Veda) righteous (dharmyam) sastras (Sarasvati) enjoys a spiritual merit equal to the gift of lands and cows." The sentiment is repeated in another chapter of the same epic (LXXV, thus: "Having studied the Vedas, if one gifts it (by teaching) to a person able to discriminate between right and wrong (nayaavit) he has discharged the great duty of a teacher (qurukarma) and will, after death, revel in Heaven." The gift of the knowledge of the different sciences and arts (kala) either by teaching or by books is repeatedly justified on the ground that a mastery of the

knowledge on which, for good and evil, the whole universe depends, should be ensured to a supplicant:

Sastre yasmaj-jagat-sarvam samsritam ca subhasubham | Tasmac-chastram praytnena datavyam subhakarmana || —Nandipurana.

The same sentiment is expressed in other words in the Devipurana:—

Vidyaya vartate loko dharmadharma ca vindati | Tasmad vidya sad deya drishtadrishtaphalarthibhih ||

"Faith is dependant upon mastery of knowledge. Discrimination of right and wrong is the gift of learning. Hence, promulgate learning" repeats the same purana.

A list of the subjects to be taught, in which manuscripts beautifully transcribed are to be given away, will be of interest. Such a list will include the Vedas and their (angani), the Siddhantas (Saiva auxiliaries Vaishnava doctrinal works), Moksha-sastra, the Ramayana and the Mahabharata, the tantras of Garuda, Bala and Bhuta, Astronomy, Medicine, the 64 Arts (kala), poetry (kavya), music and dancing, philosophy (atma vidya), silpasastra (the Fine Arts), Agriculture, Logic (tarkavidya), Mimamsa, Dharmasastra and the Puranas. catalogue is merely illustrative and not exhaustive. intention is to make vidya synonymous with the whole body of accessible knowledge. The gift orally of such knowledge is to be made attractive by proper enunciation, and musical intonation. The professional reader (an artist who is commemorated in Bana's Harshacarita and still survives) and his requirements are carefully described. The sections on vidyadana, in the narrower sense, supply material, till now not adequately utilised by those who have

written of ancient Hindu education. But, in the wider or narrower senses of the term, the gift of knowledge was deemed a paramount social duty, and was enforced not only by a unique form of social organization into varna and asrama but by an elaboration of the donative principle and its transfiguration till it became the fundamental basis of a system for the preservation and transmission of knowledge. recognition by modern founders of colleges and universities of this great social duty is all the more welcome in our country to-day when the old systems have decayed and with them has gone the sense of ancient obligation. But, their number is still so inconsiderable that apart from the spiritual benefits that a Hindu hopes to derive from such enlightened munificence, a duty rests on us to commemorate so pious a service to learning as that of the Rajah of Chettinad.

CIVIL LIBERTY IN WAR-TIME

By

SIR K. V. REDDI, K.C.I.E., D.LITT., M.L.C., Vice-Chancellor, Annamalai University.

This subject is of great topical interest to India just now. The importance arises out of the fact that on the advice of Mr. Gandhi, Congressmen have started a Satyagraha movement breaking the law of the land and causing embarrassment to the Government during the present critical time. The reason why this movement has been started is not that Indian leaders were not consulted when India joined the War. It is not based on the ground that Britain has not yet granted Dominion Status to India. is based on the sole ground that liberty of speech and the Press is being restricted. The Congressmen plead that the liberty of speech and liberty of the Press are being restricted by the Defence of India rules and as Liberty of Speech and liberty of the Press are of the very essence of Democracy they must assert their right to that liberty. arguments are absolutely untenable and perverse. plead "The British say they are fighting for the sake of liberty, liberty of speech, of the Press, of Association and of Faith. Why not the British Government allow us to say what we want to say? We must be allowed to express our opinions." Perfectly true. But liberty is not license. There is a difference between the two. There 'may be occasions in the history of a nation when it will be almost criminal to allow this full amount of liberty to individuals. Liberty is good, liberty is sacred, liberty is the

birthright of everyone; but liberty abused, liberty turned into license, liberty used for the advantage of the enemy is undoubtedly criminal. Mr. Gandhi and his Congressmen do not seem to have recognised the difference between peaceful times and wartimes. They do not seem to have realised that full liberty of speech in wartime might cause great mischief. It may help the enemy to make use of it. It is not necessary to detail how in every civilised country, in every democratic country during the last war this liberty of speech and liberty of the Press had to be curtailed at least to some extent. Take for instance the country where liberty is identified almost with God. The people of the United States of America claim that their country is the birthplace of democracy and that liberty of speech and of the Press is of the very essense of democracy. They further say that it is the priceless gift which their ancestors have bequeathed to them in their Constitution.

But let us for a moment examine what had happened in America in the World War of 1914-18. Students of history are aware of the Constitution of America. When the Constitution was drafted, what is known as the Bill of Rights was introduced as an amendment to the Constitution and the Bill of Rights was made part of the Constitution of that country. The very first clause of that Bill is this:

"Congress shall make no law respecting an establishment of religion or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the Press; or of the right of people peaceably to assemble and to petition the Government for a redress of grievances."

But let us see what the United States of America and their Congress have done with regard to the liberty of speech during the war. The very Congress which is prohibited by the Constitution itself to abridge the freedom of speech and of the Press passed a number of laws in one way or other restricting the freedom. I shall instance a few of these laws.

1. The Espionage Act of 1917 prohibited the "gathering and dissemination of information regarding National Defences, which may be useful and utilised by the enemy." "False statements intended to aid the enemy and interference with military discipline, and with recruiting or enlistment in the military services" were made penal. The punishment provided for such offences were staggering, the maximum being a fine of \$10,000 and imprisonment for twenty years.

By the same Act any written or pictorial matter which transgressed the provisions of the Act was declared non-mailable, thus placing great restrictions on the freedom of the Press.

The Espionage Act is still in force. In 1940 a new Act was passed greatly increasing the penalties under it and providing punishment for "harbouring or concealing any person who has committed or is about to commit any offence under it."

2. While the Espionage Act was under consideration several amendments were introduced in both Houses for Censorship but they were all rejected. In the same year 1917, however, the *Trading with the Enemy Act* was passed under which "direct power of censorship over communication between the United States and any foreign country" was granted to the Government. This Act also imposed many restrictions upon Foreign Language

Newspapers. Such newspapers were prohibited from "publishing any item concerning the Government of the United States or any Nation participating in the War or concerning the War itself, unless they had previously filed transactions with the Post-Master General. Such items were not only made non-mailable but also the distribution of such items was made unlawful.

- 3. Next came the Sedition Act of 1918. Under this Act "making a false statement to interfere with the success of the National Forces, obstructing the sale of Government Bonds, inciting various forms of disobedience in the military forces, obstructing enlistments, disloyal abuse of Government, the Armed forces and the Flag, language showing contempt of the form of the Government of the United States or the Constitution or the military forces or the Flag or the Uniform of the Army or Navy, promoting the cause of the enemy or displaying the enemy Flag, interference with production necessary to the conduct of the War, advocating any of the prohibited acts and favouring by word or act, the cause of any country with which the United States was at war and opposing the cause of the United States" were made punishable.
- 4. On the top of this there was the Conscription Act which compelled people to join the Armed forces of the Country. The American Protective League consisting purely of private citizens was given various powers. There were one lakh of members for this League in 1917 and two and a half lakhs in 1918. They watched and discovered the ablebodied persons who were evading Conscription Act. They made enquiries into suspicious activities. They detected spies, Fifth Columnists, and persons likely to commit sabotage.

5. The Congress of the United States also authorised their President to have absolute control over all communications such as the Telephone, the Telegraph, Cable, Radio and Mails.

These laws and activities were no doubt very much represented in America where they value the liberty of speech and of the Press so much. But the laws were obeyed by the bulk of the nation and those who infringed them were severely punished. And yet these laws were repugnant to the very Constitution of the country. Several laws affecting alients are even now being passed imposing enormous restrictions on their liberty of speech and association and even their rights to be employed in Mills and factories are being taken away.

Now, what is there in the Defence of India Rules against the liberty of speech and the liberty of the Press which goes beyond the laws of the United States. Mark the words in the above Acts: "disloyal abuse of the Government and the armed forces" "showing contempt of the existing forms of government" "any statement which would aid the enemy or which interferes with recruitment or enlistment." These are punishable under the American laws. Do our own laws go further than these. It would be easily admitted that the Defence of India Rules are certainly milder than the laws of the United States which as stated above worship the very idea of democracy and the liberty of speech and of the Press. Why were these restrictions imposed in America which defies the liberty of speech and of the Press so much. What was it that made the United States pass these laws. The reason is simple and clear. The liberty of the individual is nothing compared with the safety of the whole nation. If a time comes when to allow liberty of speech and of the Press to the fullest

extent might mean the destruction of the country or the subjugation of the whole nation to a foreign power no government, with the slightest sense of responsibility can allow such liberty to the individual. The liberty of the individual can never be more important than the liberty of the whole nation. When a country is defeated and becomes subject to a foreign power, where will be the "liberty" of an individual? In fact, it is in the interests of the liberty of the individual that such liberty should be curtailed if by such curtailing the danger to the nation can be averted or reduced. That is why, in times of war speeches and newspaper publications which are detrimental to the interests of the country are strictly prohibited. Various nations enforce various degrees of restriction of the liberty of speech and of the Press in times of war.

The present Satyagraha movement is based on the ground that freedom of speech is not allowed to the people. This movement is doing a distinct disservice to our country. They will be giving a handle to Hitler to magnify it and carry on propaganda that there is a great revolution in India against the British rule and that Indians are not behind the British in their struggle against Germany. It will give him an impression that this country is full of only passive resisters and hunger-strikers and that he will have an easy time in invading India. The policy of satyagraha, if followed for some more months, may result in a calamity. It is beset with grave dangers. would adversely affect recruitment to the Army. It would reduce the collection of subscription to the War Fund. would obstruct the sale of War Bonds. The country's powers of defence will thus be crippled. All this is likely to happen if unrestricted liberty of speech and of the Press which helps the enemy and endangers the safety of our

own country be allowed. Such a liberty in War time and in a crisis like the present will be simply suicidal.

The law of all civilised countries protects the individual from slander and libel even in peace time. Much more, therefore is the necessity for the law to abridge in wartime the freedom of speech and of the Press, which may endanger the safety of the whole nation.

LEGAL BASIS OF INDIAN STATES

By

PROF. K. R. R. SASTRY, M.A., M.L., Law Dept. University, Allahabad

Very often the basis of paramountcy comes in for examination. Paramountcy of the British Crown over Indian States "appears to present a peculiar case of conquest operating by assumption and acquiscence."

In order to examine the question of legal basis of Indian States it is necessary to remember that there are at present 601 Indian States, principalities, estates and Jagirs.² They have been variously classified in respect of their de jure and de facto Status:

Lord Oliver's classification is very sound:—

- I. Quasi-Sovereign States with treaties in which Sovereignty and rights of internal Government have never been surrendered.
- II. Those in which certain rights of interference have been established by treaty and whose independence is thus partial and subject to effective supervision.
- III. Great number of petty States the Sovereign Control of which has been taken over by the transference of their vassalage from some other Indian Sovereign
 - 1. Westlake, "Collected Papers," p. 214.
 - 2. Vide Memoranda on Indian States, 1940.

States which previously exercised or claimed dominion over them³

In respect of their membership of the Chamber of Princes, the Butler Committee divided them into three classes. Sirdar D. K. Sen divided them into seven classes. The Veteran Indian administrator A. B. Latthe suggested a three-fold classification in a dynamic setting:—

- I. States which have or may have as full powers of internal autonomy as possible.
- II. States which have or may have the same powers of full internal autonomy consistently with their being grouped together to form such units of a Federation.
- III. States which have limited jurisdiction and powers of legislation even at present and are not entitled by treaty or usage to full jurisdiction and unlimited powers of legislation.⁴

GENERAL HISTORICAL BACKGROUND.

Many Indian States had maintained an independent existence for hundreds of years and some States as Travancore, Jammu, Orchha, and Hyderabad and many of the Rajput and other States have never been conquered or annexed. It is true that some of the Indian States "had been able to establish themselves in a position of practical independence, yielding only a nominal allegiance to the Emperors of Delhi and were able later to secure recognition from the British Power."

- 3. Foreword to K. M. Panikkar's work on "Relations of Indian States with the Government of India, p. VII.
 - 4. A. B. Latthe "Problem of Indian States," pp. 7 and 8.

The Status of some important Indian States at the time when Treaties or Sanads were contracted with them may here be indicated.

At no time was Travancore conquered and the "Treaties were on the basis of two Sovereign States contracting with each other, one of which no doubt was much more powerful than the other and obtained favourable terms."⁵

Cochin though a friendly State had the Treaty of 1809 after Britain suppressed the insurrection against the British power.

The Nizam of Hyderabad vis-a-vis the Moghul Power had the Status of the Elector of Brandenbury or Bavaria. He was treated as a "perpetual Ally"—Nay, the East India Company bowed in compliment by offering 'bags of gold' to the Great Moghul till 1842-43.

The Mysore Ruler owes his Status to a restoration made by Britain Solely in virtue of the powers of the British Government got through Conquest.

The Gaekwar of Baroda, except with reference to the province of Okhamandel and the island of Bate wherein Sovereignty was obtained through the grant of the East India Company, was de jure Sovereign in his territory through the right of Conquest and through functioning as the "farmer" of revenue of territories under the Suzerainty of the Peishwa.

Gwalior had a separate existence in law since the Treaty of Salbai (1782) and the East India Company enter-

5. Reply of Sir C. P. Ramaswamy Aiyar dated 5th August, 1940.

ed into a treaty of alliance and mutual Defence (1803) with Scindhia.

Rising in his stature from a soldier of fortune to that of a de facto and de jure Sovereign of territories conquered the Holkar of Indore had once a Status in law sufficient to exact tributes from Udaipur, Jaipur, Jodhpur, Kotah, Bomdie, and Karanli.

Dhar rebelled in 1857 and it was later restored after confiscation.

Bhopal's Status in 1817 was that of a Sovereign de facto and de jure.

Orchha is the only State in Bundelkhand which was not held in subjection by the Peishwa. The Treaty of 1812 recognizes the ancient Sovereignty of the "possessions" of the Rajah of Orchha.

With reference to the Rajaputana States they were taken into 'protection' by the East India Company in their attempt to erect a "barrier against" the Pindarees. These Rajput States had thrown off the Shackles of control by the Moghul Sovereign at the earliest time when it got weak. Udaipur had continued her Sovereignty in spite of plunders and exaction of *Chauth*, while she was taken into the protective system. Jaipur, Jodhpur, Bikaner, and Alwar, had separate Sovereign existence when they became allies.

Maharaja Ghulab Singh's title to Jammu, Ladakh and Baltistan was through conquest; he acquired Sovereignty over Kashmir by purchase, (Vide Art I and II Treaty of Amritsar, 1846).

The Phulkian States of Patiala, Jind and Nabba had 'Sovereign' existence. They got further territories from

the British Government through Sanads for acts of loyalty during the Mutiny (1857-58).

Of the Orissa States (26) owing to administrative grouping the Superior States of Keonjhar and Mayurbhanj had not received sufficient recognition in later Sanads issued to them unilaterally.

The Kathiawar States have been classified into five classes. The Company's Sovereignty over them had to start with a dual source flowing from the Peishwa and the Gaekwar.

The Mediatized Chiefs of Central India were formerly under tributary obligations to Scindia, Holkar, or the powers of Dhar and Dewas and sometimes to all these chiefs. These chiefs owe their present individuality to the big arm of Britain.

LEGAL THEORY

The legal basis of all Treaty and Sanad States thus rests on prior Sovereign Status or rendition and restoration by the Paramount Power. (Examples of the latter:—Mysore, Jhalawar, Benares).

There is authority in legal theory for the view that a weak State which in order to provide for its safety places itself under the protection of a more powerful one and engages to perform in return several offices equivalent to that protection without however divesting itself of the right of Government and Sovereignty, does not cease to rank among the Sovereigns. (Vide Grotius, Pufendrof and Vattel for this view).

It can only be stated that Indian States—in different degrees and varieties of internal Sovereignty—have long

ago lost their recognition as persons of international law. With Shreds of Sovereignty intact, with Rulers who have some rights of foreign Sovereigns while travelling abroad, with subjects who are British Protected Subjects while travelling outside their States, the Status of Indian States is quasi-international.

While such is their legal basis, it is quite another matter—essentially political cum administrative—whether in the present posse of affairs—national as well as international—paramountey should continue to be a "hospital with numerous patients incurable but undying." No violence would be done to treaty, Sanad, or engagement if the existing 601 States are reduced to 200 as many petty estates and Jaghirs have been the results of British Protection. That would be a matter for determination and decision by a Royal Commission appointed by the British Crown.

WAS ASOKA AN UNQUALIFIED PACIFIST?

By

R. Sathianathaier, M.A., L.T.

A MILITARIST

Bindusara, the father of Asoka, was a warlike emperor whose achievements fell short of the conquest of Kalinga or Orissa and were to some extent neutralised by a confederacy of Tamil princes—a league which was powerful till its dismemberment about 165 B.C. He died about 273 B.C., and Asoka's career as a militarist followed. Buddhist literary tradition emphasises his bloody fratricidal struggle to secure the imperial throne of Pataliputra, and represents him as Chanda (fierce)-Asoka in contradistinction to his later role as Dhamma (pious)-Asoka. Even those who discredit that tradition will have to regard him as an undiluted militarist in the light of his own account of the Kalinga war waged by him about 261 B.C.

THE GREAT CARNAGE

Asoka's Rock Edict XIII describes the terrible carnage resulting from his war with Kalinga and regards its dire consequences as inevitable on the ground that that country was "an unconquered country." He does not tell us why he attempted a conquest unattempted by his father or grandfather. Reading between the lines of the edict in question we are justified in thinking that the Kalinga war was one of pure aggression. The people of Kalinga are not stigmatised in that record as rebels, and if they were rebels, Asoka would have made their rebellion a peg on which to

hang his moralisings. Therefore the theory of Kalinga's revolt is ruled out, and that emperor in the early period of his reign was responsible for a war of unprovoked aggression.

Psychological Reaction

The unmerited sufferings of the people of Kalinga and particularly of those practising Dhamma threw Asoka into a reflective mood. He sincerely wept over the woes of Kalinga and realised the criminality of aggressive warfare. What is the character of Asoka's repentance? How far did he abjure militarism and turn pacifist? is generally supposed that he became an unqualified pacifist, that his new role affected the military strength of the Maurya Empire adversely, and that his successors inheriting his unwarlike policy became its victims; in short, Asoka's unalloyed pacifism destroyed the roots of India's national existence. Our question is whether he hankered after peace at any cost, whether he regarded aggressive warfare alone as sinful, or all warfare including the defensive and punitive varieties of it. If he was only against aggression, all the deductions from the wrong interpretation of his new role are untenable. It is hard to believe that Asoka, a militarist to the core on the eve of the Kalinga war, was transformed out of recognition by that war, that consideration whipped the offending Adam out of him completely, that in his case reformation came in a flood, and that his "Hydra-headed wilfulness" disappeared without leaving its marks on him. Apart from probabilities, what are the facts of the case?

A QUALIFIED PACIFIST

Several considerations militate against the assumption that Asoka was transmuted by the Kalinga war into a paci-

fist sans phrase. No doubt he became a sadder and a wiser man and eschewed aggressive warfare. He gave much attention to the establishment of beneficent administrative norms, particularly in Kalinga in order to heal its wounds. His outlook on life changed substantially, and the empire as a whole was the beneficiary of that change. Still Asoka did not cease to be an imperialist. He never contemplated the rendition of Kalinga, the conquest of which had rounded off the Maurya Empire. In Rock Edict. XIII he says: "Devanampriya (Asoka) thinks that even (to one) who should wrong (him) what can be forgiven is to be forgiven . . . (The inhabitants of) the forests . . . are told of the power (to punish them) which Devanampriya (possesses) in spite of (his) repentance, in order that they may be ashamed (of their crimes) and may not be killed."* In the special Jaugada Edict II it is said with reference to the border tribes of Kalinga that "the king will forgive them what can be forgiven." Further, Asoka exhorts his descendants not to make any navam vijayam or new conquest. Thus his new-born passion for dhammavijaya, or conquest by rightcourness (not by the sword), was not undisciplined, but strictly controlled by the needs of an extensive empire. Morever, he stresses this world and the next in his edicts. Therefore during the major part of his long reign (c. 273-c. 232 B.C.) he stood for nonaggression but not for absolute pacifism, and his sane imperialist outlook, which was the outcome of the Kalinga war, maintained the balance between the spiritual and non-spiritual factors in life—a balance indispensable to the progress and stability of civilisation.

^{*}Dr. E. Hultzsch, Corpus Inscriptionum Indicarum, I (1925), p. 69 Ibid., p. 117.

RIGHT TO WORK

By

P. SATYANARAYANAMURTI, B.A. (Hons.),

HISTORY OF RIGHT TO WORK.

In ancient times the question of the right to work did not arise at all, since the worker was a slave. During the Middle Ages also things were almost the same. It was only in modern times that some attempts were made to establish this right to work. Thus we find Robert Owen and Fourier making this right one of the important items of socialist agitation. Similarly in the Revolutionary period, French workers were loud in their demand for the right to work. But nothing was done in this direction. The earlier Declarations of Rights in France and U.S.A. at the end of the 18th Century do not contain a reference to the Right to Work. Thus the French Declaration of the Rights of Man said "Men are born and always continue free, and equal in respect of their rights. Civil distinction therefore can be only on public utility. The end of all political associations is the preservation of the natural and imprescriptible rights of man and these rights are liberty, property, security and resistance to oppression." The American Declaration also runs on similar lines. They did not stress the right to work, probably because the problem of employment had not become acute at the end of the 18th Century. With the dawn of the Industrial Revolution the nature of industrial organisation completely changed. Production was no longer carried on in the cottage to order, the

instruments of production being owned by the worker himself. It was carried on in anticipation of demand. Due to the introduction of machinery thousands of workers were thrown out of employment. This problem of unempoyment has become still more acute in the post-war period due to the maladjustment brought about by the Great War. The acuteness was further aggravated by the great depression, and the following figures of unemployed men in the principal countries in 1930 will clarify the position:

U. S. A.	8.3	millions
Germany	4.89	${\it millions}$
England	2.66	millions
France	0.82	${\bf millions}$
Italy	0.75	millions

Total in the principal countries: — 17.45 millions

This phenomenal figure of the unemployed led everyone to think of the necessity of recognising the importance of the right to work and the need to guarantee it. Thanks to the constitution of the U.S.S.R. which guaranteed the right to work by Article 118 of the Constitution the Right to Work is now assured by the socialist organisation of the national economy, by the steady growth of the productive forces of Soviet society, by the elimination of the possibility of economic crisis and by the abolition of unemployment.

MEANING AND IMPLICATIONS OF RIGHT TO WORK

The right to work can mean in the words of Laski "no more than the right to be occupied in producing some share of the goods and services which Society needs." It does not mean the right to some particular work. A Prime

Minister who has been overthrown has not the right to be provided with the labour of an identical character. Society cannot afford each man the choice of the efforts he will make. It also means that the man who is deprived of the opportunity to work is entitled to the equivalent reward of that opportunity i.e., when an individual is thrown out of employment and no work can be found for the time being, it is the duty of the State to provide him with a maintenance. Every well-ordered State should have a system of unemployment benefit to which the working people themselves would make some contribution. Laski's judgement "the principle of insurance against unemployment is integral to the conception of the State." To be his best self, man must work and—absence of work means provision, until employment again offers the opportunity to work. (ibid). But a bonus or allowance to which the individual himself has not contributed a certain share does not commend itself to us. It is bound to increase pauperism and demoralise the Working Classes. The lot of the pauper is not to be made better than that of the hard-working independent labourer.

A man has not only the right to work but he has also the right to be paid an adequate wage for his labour, i.e., a wage necessary for "creative citizenship." All men need food, clothing and shelter, a certain amount of leisure and opportunity for education and culture for the development of the best that is in them and no one should be allowed to fall below this standard. "The right to an adequate wage" says Laski "does not imply equality of income, but it does imply that there must be a sufficiency for all before there is superfluity for some."

The right to safety and security, leisure and education are all corolaries to the right to work. Conditions of safety

to prevent any accidents during work is of utmost importance. Material security in old age and also in case of sickness or loss of capacity to work ought to be guaranteed. A certain amount of leisure and education are also essential. Thanks to the Factory Acts which guarantee these to some extent, all these privileges now enjoyed by the workers will ultimately result in the increased efficiency of the great factor of production—labour. In addition to all these, it is better that the worker is also given a share in the government of the industry, because otherwise economic freedom will be incomplete.

Finally the right to work also implies the duty to work. No doubt the worker has several rights over the State and the Employer. But he must also remember that he has got a duty to the employer and the community. He must be ready to work and continue at work until the contract is at an end, while the employer is also under the same obligation to continue until the contract is lawfully put an end to. He has a duty to be reasonably competent and fit for his work and position. He has a duty to be honest i.e., he should not take secret commissions or discounts or exploit his knowledge of the employer's business for his own aggrandisement. He has to perform his work in a spirit of sympathy and co-operation as far as possible. Lastly he has also a duty to maintain reasonable economic peace by not resorting to Strikes on flimsy grounds.

CONCEDING THE RIGHT TO WORK

At the present day the importance of guaranteeing the right to work is established beyond doubt. In spite of this view, the Capitalist Society has not been found competent to meet the right demand of the worker. So long as man continues to live he must have the necessary resources for

existence. Work alone provides the great majority mankind with subsistence. means ofofthe apparently inexorable laws of capitalist economy drive a considerable section of the working classes to a state of unemployment in a world which is seemingly governed by economic lunacy. Many millions of people live lives of semi-starvation and unemployment because States will not organise access to the natural resources of the World. Vast portions of the World's surface are left untilled because of the false sense of economic nationalism. Similarly until internationalism reaches the stage where international trade is controlled by the Economic Council of a powerful League of Nations, it will be criminal for any country to neglect to develop to the utmost its own national resources and to leave its population to shift for themselves on the precarious circumstances of foreign markets. The problem of unemployment can be solved only by the provision of more work. But this is possible only when there is an effective demand for the goods and services produced by labour. Unemployment is capable of solution by the scientific organisation of production and distribution by rendering effective the demand of the bulk of the population for the commodities produced; by stopping national expenditure on unremunerative purposes; by the better equipment of industrial workers of all grades; by the fuller development of the resources of the world; by the removal of artificial barriers to the free flow of international commerce and by the disarmament of all nations by a powerful supernational League of Nations. The International Association of unemployment organised in 1910 should get more support from all. There should be provision in every country for compulsory insurance against unemployment to which contributions will be

made by the State, the Employers and the workers. Germany under Bismarck led the world in this direction by the provision of Unemployment Insurance by the Act of 1894. By the National Insurance Act of 1911, unemployment insurance was secured in certain groups in England. In the post-war period it was greatly developed in all countries and in 1924 the labour government in England adopted a scheme to solve unemployment. In short compulsory unemployment insurance has been the main future in the post-war period.

Labour should be accorded ready access to employment by establishing employment bureaux subsidised by the State for workers. The earliest private establishment of this kind was started in Germany in 1865. Later on between 1893-1900, 85 such bureaux were erected. Berlin Register established in 1883 worked successfully and in 1908 it secured work for 120,000 men. In 1909 Mr. Churchill introduced the Labour Exchange Bill and by 1915 there were about 401 such exchanges.

"Home Lodging Houses" and "Public Relief Stations" were also started in Germany to improve the lot of the workers during periods of unemployment. Such organisations should be popularised everywhere.

The crux of the problem is, can any economic system guarantee this right to work? Capitalism, in which unemployment is inherent, is the negation of the right to work. Under Capitalism production is carried on in anticipation of demand and the only motive is profit. There is no central planning. Hence economic crises are inevitable, and this results in unemployment. In spite of this great handicap capitalism can try to do something by a careful public works policy and a suitable monetary policy and by

providing unemployment insurance etc. But the real problem will still remain unsolved.

Is the Socialist system then better for tackling the problem of unemployment and for guaranteeing the right to work? According to Pigou a Socialist system with its central planning is better than Capitalism for this purpose, because factors of production can be easily adjusted in a nationalised economy. But this advantage of Socialism over Capitalism is nullified by other drawbacks of Socialism. The proper balance between State authority and individual initiative is entirely and ruthlessly suppressed by Socialism which stands for the omnipotence of the State.

Strange as it may sound Socialism is not social. It is even aggressively anti-social. The summary abrogation of even the most elementary human rights and the starving wages that it pays to its enslaved labourers in Russia are facts made known to the World by convinced Socialists and Communists on their return from the socialled paradise of Soviet workers. Men who went to search for truth in Russia were all bitterly disappointed and disillusioned when they saw the horrors of the Soviet regime.

Another anti-social aspect of socialism is the class-war which if its object materialised would mean the end of all economic organisation. Class-war is an artificial engine, not the natural outgrowth of a working economic system since economically "capital cannot do without labour nor labour without capital."

Above all, under Socialism the incentive for work is lost and consequently there will be a fall in the national

income. The per capita income will go down and the position of the poor will not be universally improved even when you transfer wealth from the rich to the poor. We are one with Sidgwick when he says "I object to Socialism not because it divides product badly but because there will be so much less to divide."

Neither Capitalism nor Socialism can, as they exist to-day concede the right to work. Various and varied have been the suggestions of the Economists. The corporate idea seems to come nearest to conceding this right to work. The corporate State in Italy is based on the idea that the Marxian interpretation of a class-war in Society is fundamentally wrong. Workers and employers are to be considered partners in performing one social function namely, production. And therefore an attempt should be made to bring together labourer and employer in institutions recognised and directed by the State. It is an attempt to abolish the evils of Capitalism not by abolishing private property but by regulating it in the interest of the common good. At present the experiment works because of the dictatorship behind it. It is too early to say whether it can work without the power of the State behind it. But its principle—collaboration between Capital and Labour and not antoganism—is sound.

The corporative Society which results from private initiative of free men organising themselves with the approval of the State, like the one in Portugal is said to be the best. According to this idea individuals have the freedom to associate into groups representing professions recognised by the State. Such corporative bodies are autonomous bodies and stand midway between Individualism and complete State control. They should represent

both employers and employees in equal number and should receive guidance at the hands of the State. These associations may form themselves into national guilds and may be given the authority to regulate wages, hours of work, marketing, insurance and other things which are of common interest. The professional interest can be incorporated into common interests with the necessary amendments which the State may deem necessary. It must be simple, intelligible and free from all undue control from the State. Though even here there are difficulties human as well as technical, they can be avoided if the scheme is worked with proper goodwill on the side of the State and citizens on the one hand and on the bonds of common interests of the employers and employees on the other. Then only the worker's needs and in particular his right to work will be better understood both by the employers and by the State in order that this long cherished right to work might be safeguarded.

Conclusion

The worker with his right to work has now become a force to be reckoned with. In Mexico and Russia, he even succeeded in capturing political power, while Labour Parties were occasionally successful in establishing their governments in some democracies like England and France. The most potentially powerful movement in the coming generations might be organised labour. There is now a definite swing towards socialism in all countries. Radical labour opinion is veering round to communism. If communist dictatorship is to be averted the present capitalist system must be cleansed of its anamolies. Corporative democracy, containing the salutary features of corporativism and Socialism is the only solution for the future polity and economy of the World. Corporative democracy will be a

synthesis of the best elements of all political doctrines, allowing the Capitalist and the worker a large measure of freedom.

In conclusion it must be said that the case for the right to work is immense and it is the duty of the State, whatever economic system it may have, to guarantee this right to the worker. The nature and functions of the State have undergone a thorough change and it is no longer a Police State of the 18th Century. The Social-Service State of the 20th Century is under the obligation to guarantee this right to work in order that it may fulfil its mission.

THE MYSTERY OF THE UNBORN.

(Garbha-Upanishad to Entwicklungsmechanik).

By

R. V. SESHAIYA, M.A.,

"The One Spirit's plastic stress Sweeps through the dull, dense world, compelling there

All new successions to the forms they wear"—Shelly.

Life presents many wonders and riddles, but the greatest of them all is the power of individual development possessed by living creatures. A minute drop of living jelly or protoplasm floating on the top of the volk in the hen's egg takes gradually the form of the bird and hatches out as the chick in three weeks. The minute fertilised egg or ovum of the elephant gives rise to the baby elephant as a result of a creative differentiation of six hundred and fifty days during which new elephant tissue appears at the rate of fourteen pounds a day. Mouse and man alike have similar minute, and apparently insignificant beginnings. The fertilised ovum of the mouse differentiates itself into the baby mouse in twenty one days at the average rate of one-fourth ounce of mouse tissue per day. The human egg, almost invisible to the naked eye, being a mere blob of living matter of about 0.13 mm. in diameter passes through a series of kaleidoscopic changes to attain the human form and organisation in nine months. and is ushered into the world as the seven pound baby.

How does the simple, often microscopic egg, in which no trace of its future destiny can be detected, develop into the complex organisation of the adult? What brings about the differentiation of the various organs of the future adult? And how do the several parts that become differentiated in development get integrated into the unified organism? How comes about the co-ordination of the various events of development in space as well as in time? These questions, which constitute the subject of embryology, have puzzled laymen, scientists and philosopers alike in all ages, and various theories, fanciful and speculative, philosophical and scientific, have been invented in all ages to explain the mystery of development—how the unborn becomes the born.

Among the ancient Hindu writers, the authors of the Garbha-Upanishad, and also Charaka and Sushruta, refer to the problem of human development. The Garbha-Upanishad describes the development of the human embryo as follows:—"It is semi-fluid in the first night; in seven nights it is like a bubble; at the end of half a month it becomes a ball. At the end of a month it is hardened; in two months the head is formed; in three months, the region about the feet; and in the fourth month the region about the stomach and loins and also ankle is formed; in the fifth month, the back (or spinal) bone; in the sixth, the face of the nose, eyes, and ears; in the seventh it becomes united with Jiva (Atma); in the eighth month, it becomes full (of all organs); in the ninth, it becomes fatty."

It will be interesting to compare this account of the development of the human embryo with the findings of modern embryology. Human embryologists distinguish three main periods during the intra-uterine period of

development: the period of the ovum or egg, from fertilisation to the formation of germ-layers, lasting for about ten to fourteen days, the period of the embryo, until the embryo has assumed a definitely human appearance, till the end of the second month; and the period of the foetus. None of the very young developing eggs have ever been observed, the earliest stage that has been observed being about eleven days old. Modern accounts of the very early development of the human embryo are to a large extent inferences from the study of rabbit, monkey and other closely related animals. It is therefore all the more remarkable that the Garbha-Upanishad should have described the appearance of the early stages by suggestive and fairly correct comparisons. "Like a bubble" in seven nights. "Like a ball" in a fortnight are fairly apt comparisons of the early mammalian embryo. At the end of a month the human embryo is about 6 mm., and shows an increase of about fifty times in size and eight thousand times in weight. In the month the human embryo (8 mm. to 25 mm. in length). develops what is unmistakably a human face, and a very markedly distinct head which forms about one-half of the entire body. "In three months the region about the feet," is quite a correct statement, for the feet become well diffrentiated and are no longer paddle like as in the previous stages. During the fourth month the external sexorgans develop from an indifferent neutral stage to those characteristic of each sex: the head is about a third of the body, for the region about the belly increases in size; the arms and legs are rotated into their final positions, in which the elbows point backward, the knee forwards, and the soles of the feet face downward and away from the body. "In the fourth month the region about the

stomach and loins and also the ankle is formed." In the fifth month the body axis is straightened, the head is perfectly erect and the back is "almost unbelievably" straight. more straight than it ever will be. In the sixth month the eyelids, fused since their formation in the third month, open. "The sixth month foetus, if born, will breathe, cry, and squirm;" it will live for a few hours. "In the seventh month the embrvo becomes united with Jiva". The seventh month embryo is frequently able to survive premature birth; the nervous system is sufficiently developed to meet the demands of independent life; the cerebral hemispheres develop to such an extent that they cover almost the whole of the rest of the brain; they begin to show fissures and grooves. Moreover the embryo of the seventh month is sensitive to touch, possesses the sensation of taste, and can probably perceive the differences between darkness and light. The eighth and ninth months are concerned mainly in giving the finishing touches to the foetus preparatory to being ushered into a new world

One cannot fail to be impressed by the soundness of the observations of the Garbha-Upanishad. They could not have been the creations of mere fancy. But the same cannot be said of the account of Charaka and Sushruta (and Dhanvantari too) who held the view that in the egg or fertilised ovum all the organs of the adult organism were present, and that development was merely the unfolding of what was already present in the egg. A similar view, the preformation view as it is called, was held by many of the European Scientists till about the nineteenth century.

Interesting as some of the observations of the ancient Hindu writers are, they do not constitute the science of embryology, and we do not seem to have any references to the development of animals. Regarding the causal factors, the prevalent view was that Life or *Prana* is an independent principle which regulates the development of the ovum. "The Life is prior to the senses, for it regulates the development of the fertilised ovum which would putrefy if it were not living, and the senses with their apparatus develop subsequently out of the ovum"—Sankara, *Sariraka Bhasya*, Chapter II, Pada 4, Sutra 9.

For the foundations of Scientific embroyology we have to look to Greece, and in particular to Aristotle who took all knowledge for his province and is recognised as the father of Zoology as of other branches of knowledge. Aristotle's "De Generatione Animalum" deals with the development of animals. Though the observations embodied in it are not all accurate Aristotle's insight and interpretation of the phenomena command our respect. We must mention in particular his criticism of erroneous theories like the preformation theory and the theory of Pangenesis. It is interesting to note that these theories were revived later in Europe, and that Charles Darwin was the exponent of the latter theory.

After Aristotle, the study of the development of animals received no attention, all through the eras of fettered thought, and even long after. It was only during the thirties of the last century that the foundations of modern embryology were laid by the publication of Von Baer's treatise on the Development of animals with observations and reflections. The publication of Darwin's 'Origin of Species' gave an additional impetus, and a host of distinguished workers investigated the various animal types and revealed a wealth of extremely interesting facts

relating to the development of animals. And it came to be recognised that no division of Biology is more fascinating than Embryology. In the words of Minot "The stories which embryology has to tell are the most romantic known to us, and the wildest imaginative creations of Scott or Dumas are less startling than the innumerable and incredible shifts of role and change of character which embryology has to entertain us with in her life-histories."

The story of animal development is briefly as follows:

- i. All animals except the lowest begin as fertilised egg, or zygote, as it is called. The egg itself is the result of the union of the sperm or male germ cell and ovum or female germ cell. There are a few cases of animals developing without fertilisation of the egg, which are spoken of as 'virgin birth' or 'parthenogenesis.' The eggs of some animals can be induced artificially to develop without fertilisation.
- ii. The fertilised eggs vary in size, and in the amount and distribution of reserve food material or yolk contained in them. The eggs of birds are large owing to the enormous amount of yolk in them. The eggs of most animals are very small.
- iii. The first steps in the development of the egg are more or less the same in all animals. The egg divides into smaller and smaller cells without growing in size at all, till there is a ball of small cells instead of a single cell. This process is called segmentation or cleavage and forms the first chapter of development.

The pattern of cleavage, however is not the same in all animals, but varies much, being dependent on the amount and distribution of yolk in the egg. The bird's egg which has a large amount of yolk does not segment as

a whole; only the superficial patch of protoplasm divides and forms a little plate of cells, the blastoderm. Eggs with little or no yolk like the human egg or sea-urchin's egg divide as a whole and into equal parts. In some other animals the egg may divide as a whole, but the products of the division, the blastomeres, as they are called, may not be equal.

- iv. The ball of cells resulting from cleavage is usually hollow, enclosing a central cavity, and is termed a blastula. In some animals the blastula is a solid ball, and in others as in the bird it is represented by a plate of cells.
- v. The cells forming the blastula next begin to arrange themselves to constitute the chief foundations of the future organism. By the tucking in of some portion, or by the growing over of some of the cells over the rest, or by the splitting of some portions, the cells move into new positions, and a two-layered and then a three-layered embryo is produced. The outer is the ectoderm, the middle is the mesoderm, and the inner the endoderm. These three layers form the material out of which the different organs are subsequently built up.
- vi. Next begins the mysterious process of differentiation of tissues and organs. Imagine a lump of plastic material—plastic marble, if that were possible moulding itself into a group of bricks, the bricks arranging themselves gradually into foundation stones, basement structures, then pillars, walls, arches, etc., and finally shaping themselves into a noble and magnificent edifice like the Taj Mahal. 'A miracle' you would say. What the embryologist sees is no less marvellous. The three germinal layers, the ectoderm, mesoderm, and endoderm, become moulded by foldings, ingrowths, outgrowths, thickenings, and finally give rise to

the rudiments of tissues and organs. Out of the ectoderm or outer skin of the embryo arise gradually the nervous system, sense organs, and skin; out of the mesoderm the muscles, blood vessels, heart, the ovaries and testes, and the skeletal structures. In the development of every animal these various processes occur in orderly sequence. To take but one instance, the first indication of the nervous system is a thickening of the middle region of the back of the embryo from one end to the other. This is the nerve plate or neural plate. The sides of this thickening rise up as folds, grow, meet above and form a tube. The tube sinks beneath the outer skin or ectoderm.

The front portion of this tube—the nerve tube—swells up, and later undergoes many changes to form the brain. The remaining portion of the tube is transformed gradually into the spinal cord. Whether it is the embryo of fish, frog, snake, bird or man, the same orderly sequence of events are seen in the early stages of the development of the brain.

vii. Generally as one watches the development of the animal from the apparently simple homogeneous egg into the complex organism, one cannot help the impression that the panaromic representation of the various stages is all preordained, and that the embryo is travelling to a definite goal, the formation of a replica of the parent. Development is an intricate web woven by the three Sisters, the three Fates. At every stage, development is seen to have spun out of the past, and also to be enmeshing the future. The various stages, blastula, gastrula etc., are merely cross-sections in time of one organic process of development.

In some animals the path of development instead of being straight, is devious and the embryo has to assume temporary forms and structures quite different from those of the adult and unconnected with the main line of development. The butterfly's eggs developing into caterpillar and chrysalis or pupal stages before attaining the form of the butterfly, and the eggs of the frog developing into fish-like tadpoles are familiar examples of this kind of indirect development. There are many other examples of animals travelling a tortuous road in development. It is not always easy to explain why the development should be complicated by the interpolation of larval stages.

Development is generally one of progressive differentiation and increasing complexity of the organism; but this is not always so. Some organisms, after a period of initial differentiation retrace their steps, and undergo de-differentiation or retrograde development. The most striking example is that of the Ascidian or sea-squirt. The adult creature shows no trace of semblance of an animal. It is like a sac, leading a vegetating existence attached to some rock in the sea. The eggs of the Ascidian develop into tadpole like creatures, with the distinct organisation of the back-boned animals. After a period of free-swimming life, the creature settles down on a rock, and a thorough overhauling of the organisation takes place, in which important members of the larval body like eyes, the supporting structure—the notochord etc., are discarded. Thus the tadpole like creature is transformed into the Ascidian. Many parasites and sedentary animals complete their development in a similar manner by putting back the clock of development. The study of the development of various animals reveals another interesting feature. The early embryos of the fish, lizard, bird and mammal are very much alike. The resemblance is not merely in the general form, but also in the presence of some of the internal organs, and in the general development of the various organs. A human embryo of about four or five weeks is provided with gill slits like those present in the sharks. Such resemblances led to the formulation of the famous Recapitulation theory or Biogenetic law of Haeckel. This hypothesis explains the resemblances between the embryos of the various groups by supposing that development is influenced by the evolutionary history of the race, and that the developing embryo repeats in a general way and in a certain measure the history of the race. The resemblance of the tadpoles of the frog to the young stages of the fish is explained by the fact that the Amphibians or frogs and their allies are evolved from fish-like ancestors.

Such are the general features of animal development. There are endless variations in the details of each and every process in the different groups of animals. But all these do not explain the mystery of development. By saying that the egg becomes a blustula or that the brain is formed out of the outer skin of embryo, the mystery is not solved. Till about the eighties of the last century, students of development concerned themselves mainly with the description of the kaleidoscopic series of transformations undergone by the embryo in the progress of development. The more orthodox adherents to the recapitulation theory interested themselves in interpreting development as an historical process, and investigations on the development of animals served only to reconstruct their genealogy, or visualise their hypothetical ancestors. "Hypotheses" said Goethe, "are the cradle songs with which the teacher lulls his pupils to sleep," and the Recapitulation hypothesis of Haeckel was no exception. But, in the year 1880 Wilhelm Roux broke away from the established tradition of

embryologists and initiated the experimental enquiry into the causal factors of development. He plunged a hot needle into one of the two blastomeres in the two-celled stage of the developing frog's egg. By this action, which he compares to the dropping of a bomb on a newly started factory, the uninjured half of the egg developed into a half-embryo, and later on became a complete embryo. The significance now. What concern us does not result interests us now is the inauguration of the experimental method or Entwicklungsmechanik as Roux christened it or the "causal embryology" as Brachet termed it. Thousands of experiments have been made since the time of Roux on the embryos of animals to analyse the developmental processes and discover the causal factors underlying the processes. The place of honour among the investigators of experimental embryology is held by Spemann, the Nobel Laureate.

The new school of embryology has developed a very delicate technique, requiring great skill on the part of the operator. Micro-surgical operations on the minute embryos, like cutting the minute segmenting egg into two or more bits, removing a small part of the embryo, or rudiment of an organ, and grafting it in another place in the same embryo or in another embryo of the same species, or even of a different species, and sometimes into the body of the adult, cultivation of the embryos in vitro or artificial cultures with normal environment or with modified or controlled environment, inducing the growth of organs in abnormal situations in the embryo, inducing the production of monstrosities, treatment of embryos with poisons to detect the susceptibility of the different parts of the embryo to poisons,—these are the chief methods

employed by the investigators in the study of causal embryology.

The results of the experimental school of embryology have given us a better insight than before into the organisation of the egg and the latent factors of development.

With regard to the organisation of the fertilised egg we no longer regard it as simple and unorganised as it appears at first sight. But we do not imagine with Sushruta and the seventeenth and eighteenth century preformationists that a miniature replica of the adult organism is concealed in it to jump out of it like 'Jack in the Box', or to unfold like the petals of a flower bud, or 'develop' like the exposed photographic plate.

The visible organisation of the egg includes the double set of chromosomes in the nucleus, and sometimes there is patent a regional differentiation in the cytoplasm surrounding the nucleus, which may be due to the unequal distribution of the yolk and pigment. The chromosomes carry the hereditary factors or genes which are contributed jointly by the paternal and maternal germ cells, the sperm and ovum. But one set of chromosomes alone are sufficient so far as development is concerned, as we can see from cases of virgin birth or parthenogenesis. These genes are potential hereditary characters which can find an expression only in the later stages of development and in the adult. They do not seem to be responsible for initiating the early stages of development.

We must look rather to the cytoplasm for the factors which are known to convert the apparently static egg into the dynamic embryo. In the case of some animals like the frog, even the unfertilised egg shows a differentiation into a pigmented animal pole, and a light coloured heavily yolked vegetative pole. The distribution of the yolk and pigmentation, the position of the nucleus etc., bring about such a differentiation. In the frog the animal pole indicates the future head end of the animal, and the vegetative pole the tail end. This differentiation into poles is called polarity and is the primary expression of the egg's organisation.

How does the egg get differentiated into the animal pole or potential head end, and the vegetative pole or potential tail end? In some animals, at any rate, this differentiation is due to a high rate of oxidational or metabolic activity at one end, and a very low rate at the other. Between the two ends there is a graded difference in the metabolic rate. This is spoken of as the axial gradient. Yolk which is readily oxidisable is confined to the region of the lowest metabolic rate, which becomes the vegetative pole, and the opposite end becomes the animal pole. The axial gradient in its turn is due to another factor, which however is not in the egg but outside. This is the proximity of the egg to the blood cells in the ovary of the mother. Thus an external factor determines in the egg which is to be the future head end and which the future tail end.

The next step of differentiation—we refer once again to the frog's egg—is the establishment of bilateral symmetry. This is possible only when the dorsal and ventral sides are determined, and this is done by the entry of the sperm into the egg in the act of fertilisation. When the sperm enters the egg on one side, the pigment on the opposite side is sucked up, and a grey crescent appears exactly opposite to the point where the sperm enters. This

grey crescent is the future dorsal surface. The dorso-ventral axis represents another axial gradient, the dorsal side being the region of the highest metabolic activity. There is yet another gradient formed in the egg, from the surface to the centre. Thus the fertilised egg is a complex system with a definite organisation indicated by the axial gradients.

The egg is now set for further development, for with fertilisation the dynamic nature of the egg becomes manifest. It is not as yet visibly differentiated into different structures. Only the different parts show a quantitative difference in the metabolic rate. The next step is the establishment of a qualitative difference between the different portions, so that each will develop into a particular structure. The visible change that comes over the egg next to fertilisation is cleavage, as we have seen already. The American school of embryologists led by Wilson have carried out painstaking investigations into the history of each cell or blastomere of the dividing egg, and revealed the meaning of the process of cleavage. The egg becomes a mosaic of blastomeres each of which seems to be set apart for the formation of some specific part of the embryo. The experiment of Roux was made to see whether one of the blastomeres in the two-celled stage would give rise to a full embryo or half embryo. In some animals, even as late as the thousand-cell stage, any one blastomere, if isolated, may give rise to a complete embryo. In other animals each of the cells in the two-celled stage can give rise only to a half-embryo. These observations lead us to infer that the material for the formation of the specific portions of the embryo is separated or set apart at a very early stage in the development of some eggs, but much later in others. The former are called mosaic eggs and the later regulation eggs.

What is it that brings about the differentiation during cleavage? Is it the nucleus? Can it not be that differences between the nuclei, due to unequal divisions bring about the differentiation during cleavage? Spemann performed a very interesting experiment which shows that the nucleus is not responsible for this differentiation. He tied a hair round the fertilised egg of a newt pinching it into a dumbellshape in such a way that the nucleus came to lie at one end, while the other end was without the nucleus. course of time the end with the nucleus segmented while the other end did not segment. After several divisions had taken place, he loosened the loop and allowed a nucleus lying nearest to the end without a nucleus to pass into it. Then the loop was tightened again. This second end now began to segment, and it developed not into any special part of the embryo, but into a whole embryo, though it contained, as compared with the other portion only a fraction of the nuclear material to start with. Thus the potentiality of one or many nuclei seems to be the same. Recently Dalcq has put forward an hypothesis to explain how the egg is roused to activity. He supposes that the nuclear sap mixes with the cytoplasm while the ovum is ripening, and partly diffuses into the outer part or cortex of the egg. The cortical portion has some inhibiting influence on the egg, which is changed at the time of fertilisation. At fertilisation the cortical substance is split up and provides the substances which bring about differentiation, segregation etc. Leaving alone the details, what we have to note is that the cytoplasm contains the factors for the differentiation during cleavage.

When the frog is in the blastula stage, no differentiation is visible in it except in the size of the blastomeres and the pigmentation of the cells of animals and vegetal poles. The smaller dark coloured cells are destined to give rise to the ectoderm and the larger light coloured to the endoderm. But at this stage the egg is 'plastic' except in the region of the crescent, and the parts are interchangeable. A portion of the pigmented region the potential or presumptive ectoderm can be transplanted into the light coloured region or region of the presumptive endoderm. In the same way the presumptive endoderm can be transplanted into the dark coloured region, and it will grow into the ectoderm. In other words what is to become the outer skin may be made to grow into the inner skin, and vice versa. But this 'plasticity' is lost when the blastula becomes a gastrula, and the ectoderm cannot be exchanged for the endoderm, or the endoderm for the ectoderm. The embryo is at this stage invisibly marked out into a number of regions chemically different from one another. In other words there is a qualitative differentiation now, and the fate of each part of the embryo is now fixed. This is usually spoken of a chemodifferentiation. In the eggs of the regulation type this occurs late as in the frog, but in the eggs of the mosaic type this takes place very early.

Though the egg is analysable into a number of chemically different fields, there is as yet no visible differentiation into different structures. There now appears a new feature which brings about a visual organisation in the embryo. Gastrulation in the frog takes place by the appearance of a lip-like structure in the region of the grey crescent. This is called the dorsal lip of the blastopore. We are not concerned with the details of gastrulation, but we must remember this dorsal lip, for it is a remarkable structure. Normally, the nerve plate, the axial supporting rod of the embryo, the notochord which officiates as the 'backbone' in the embryo, all these axial structures

are formed in the meridian of the dorsal lip of the blasto-But if the dorsal lip is transplanted into some abnormal place, the nerve plate and the notocord are developed there under the influence of the dorsal lip of the blastopore. There are two kinds of newts, one with dark coloured eggs, and another with light or white coloured eggs. Spemann took the dorsal lip from the light coloured egg and transplanted it into a dark coloured egg. Thus the dark coloured embryo had two dorsal lips, one its own, and the other the transplanted one. The embryo now developed two notochords, nerve plates (or brains), one set its own and the other 'imposed'! And it was from the tissues of the dark coloured embryo that the light coloured blastopore organised the organs. The dorsal lip of the blastopore is therefore called an organiser, for it organises the embryo wherever it is placed. It is the focus about which the embryo is organised. It has been found out that the organising power of the organiser is due to a chemical substance present in it. Another interesting feature is that the organiser from a toad will organise the axial structures in the newt. And foreign tissues or agar after being in contact with the organiser for some time become infected with organising capacity, and may be used for organising the axial structures in an embryo. But the organiser can act only on competent tissues. In the particular case under consideration, the tissues are competent at the time of gastrulation. Provided the tissues are 'competent' in this sense, it does not matter whether it is ectoderm or endoderm or mesoderm on which the organiser is acting; the organiser will induce the formation of the embryonic structures. But the power or effect of the organiser will vary according to the region on which it is acting. The front end of the nerve plate will be induced to develop into the brain,

the hinder part into the spinal cord, and so on. The chemical substance extracted from the organiser will 'evoke' the formation of the nerve plate, but will not effect this 'individuation' into brain, spinal cord etc. So it is assumed that there are two factors in respect of the action of the organising centre. One is the 'evocator', a chemical substance which will merely induce the formation of a nerve plate from competent tissue, and the other is supposed to be the 'individuation field' which determines what part of the nerve plate shall be induced. Through its evocator—a chemical substance—the organiser brings about induction, through its 'individuation field' it effects organisation of that which is induced.

A central military authority may issue from its headquarters a general command for the mobilisation of troops for defence, but the particular form of defence which has to be organised and into which the command has to be translated will depend on the regional relationship of the troops. The mobilisation which is due to the command from the central authority is like the 'induction' of the 'evocator' of the organising centre in the embryo. The organising of the form of defence with regional variations depending on the regional relationships is like the 'individuation' depending on the 'individuation field' of the organising centre.

Another feature which the above analogy will explain is the self-differentiation of the different regions of the embryo, when once they have been started on the road to differentiation by the organising centre. After receiving the general command each corps in the army will decide its own details of action while in the thick of the fight. This is like the self-differentiation of different parts of the embryo after 'induction' and 'individuation' have taken place. The

early rudiment of the leg bone of the chick, while it is still a shapeless mass of mesodermal tissue, may be cut out of the embryo and grown in an artificial culture after it has started its self-differentiation; and it will continue to self-differentiate developing every detail of structure.

After the primary organiser has done its work, secondary and even tertiary organisers may appear, and bring about further differentiation of the embryo. The eye-cup which grows out from the brain tube in the embryo acts an organiser, inducing the ectoderm to form a lens. It may be cut and removed from its natural position and transplanted in the side of the embryo or in some other abnormal position, and it will induce the formation of the lens in an abnormal position.

After the organisers have done their work, the outlines of the embryo and the various organs are visible. The embryo is by now well on the road to the realisation of the form of the young organism. Functioning of the organs brings about further differentiation. Other factors internal as well as external, guide it along the road, and the hereditary factors or genes will lead it to its goal, the attainment of the form characteristic of the species. Environmental deviations may lead to developmental aberrarations as in the case of the fish Fundulus which develops a cyclopaen eye, when magnesium cholride is added to the sea-water in which it lies.

Thus the young science of 'Causal Embryology' or 'Entwicklungsmechanik' has revealed to us new land marks of differentiation in the development of the organism. Regional differences of metabolic rate in the egg establishment of axial gradients, determination of the future head and tail regions, determination of the dorsal and ventral

surfaces and establishment of bilaterality, transformation of the embryo into a chemical mosaic by the differentiation of a number of chemically different fields, the appearance of the organiser on the scene, with its evocator and individuation field and which, like Mother Carey in Kingsley's 'Water-babies', who made things make themselves' organises the parts of the embryo about it to self-differentiate into tissues and organs,—these are events of development.

The survey of animal development presented above, brief and incomplete though it be, will suffice to indicate what a complex process development is. The new embryology does not claim to have explained away the process of development, but its brilliant results have given us a better insight into the complex of development. They have analysed the big riddle into smaller riddles. It is beside the point to raise the question whether this causal embryology will ever be able to solve the riddle of development, or whether the developmental processes can be explained ultimately in terms of physics and chemistry.

Several theories of development have been formulated. To mention but a few: there is the vitalistic theory of Driesch who imports into development an undemonstrable factor, the *entelechy*; there is the mechanistic theory whose exponents hold that the 'causal postulate is perfectly applicable to living organisms, and can be satisfactorily applied to the biological order of things, irrespective of the possibility of biological phenomena being reduced to physico-chemical processes.' Other exponents of the mechanistic outlook would assume the possibility of the physico-chemical explanation of all biological phenomena as a useful hypothesis, with the reservation that biology

may discover new and unsuspected properties of life and living matter. In justice to the upholders of the mechanistic hypothesis, it must be stated that they do not hold development to be explicable in terms of the old laws of classical physics and chemistry, or by analogy to man-made machines. We have also the organismic theory which with its Holistic orientation aims at steering clear of both the vitalistic and mechanistic theories, and whose apostles like Bertalanffy would declare an autonomy for biology to enable it to develop its own concepts independently of physics, under whose shadow, they complain, Biology has languished like a plant deprived of light." It is not proposed to present here a critique of the several thories of development. For theories and hypotheses let philosophers contend, while we watch and admire the beauty of co-ordination, both spatial and temporal, of the developmental processes, and the panoromic succession of forms which the embryo wears as time 'bites' into it.

"The one Spirit's plastic stress.

Sweeps through the dull, dense world, compelling there

All new successions to the forms they wear"—

REFERENCES

- 1. Benoy Kumar Sarkar.—The Positive Background of Hindu Sociology, vol. i.
- 2. Bertalanffy and Woodger.—Modern Theories of Development.
- 3. 'Current Science' Special Number—'Organisers in Development.'
 - 4. Dalcq. Form and Causality.
 - 5. De Beer.—Experimental Embryology.
 - 6. Gilbert.—Biography of the Unborn.
- 7. Huxley and De Beer.—Elements of Experimental Embryology.

- 8. Locy.—Makers of Biology.
- 9. Keith.—Human Morphology and Embryology.
- 10. Mc Dougall.—The Riddle of Life.
- 11. Narayanaswami Aiyar.—Thirty Minor Upanishads. (Translation).
 - 12. Needham.—Order and Life.
 - 13. Russel.—The Interpretation of Development and Heredity.
 - 14. Spemann.—Embryonic Development and Induction.
 - 15. Waddington.—How Animals Develop.
 - 16. Woodger.—Biological Principles.

PATRONS AND PLACE-NAMES OF TAMILNAD

By

R. P. SETHU PILLAI, B.A., B.L., (Madras University.)

"The days of royal patronage are gone," said Nammalvar the greatest of Vaishnava saints. The same sentiment is expressed and illustrated by Saint Sundarar in one of his sacred hymns.\(^1\) These seers were obviously dissatisfied with the general degeneracy of poetic taste in high circles and the consequent lack of response to the call of the Muse. The former feels the pang so much that he entreats the gifted poets to live by the sweat of their brow instead of courting the princely gaze that used to follow them in palmier days.\(^2\) He seems to recollect the golden age in which the crowned kings and nobles of the Tamil land deemed it a privilege to honour the votaries of the Muse.

The memory of some of these illustrious patrons is preserved in the classical poems and place-names of the

- 'என்னுவது, எத்தனே நாளேக்குப் போதும். புலவீர்காள் மன்னு மனிசரைப் பாடிப் படைக்கும் பெரும்பொருள்' 'வம்மின் புலவீர்! நாம்மெய் வருத்திக் கைசெய்து உய்ம்மினே' ——திருவாய்மொழி.

Tamil country. The early Pandya kings were delighted to associate themselves with the activities of the literary men who adorned the royal academy (Sangam) at Madura and honoured them with handsome gifts and presents. The great Chola king Karikala gave a magnificent gift to the poet who pictured in a lovely poem the grandeur of Pum-Pukar, 'the city beautiful.'3 The exemplary patronage extended to the literati by some of the contemporary noblemen exalted them into an illustrious order (eluvallal) in the estimation of the country.4 By common consent the place of honour among them seems to have been assigned to Pari, the ruler of the hill-fort of Parambu surrounded by three hundred villages. He is extolled as the model of munificence by Saint Sundarar.⁵ Tradition has it that the three kings of the Tamil country beseiged his fort and assasinated him by treachery. The country of Pari is considered to be Parambanad, a division of the Pandinad, wherein the existence of a village called Pariccaram is disclosed by epigraphical evidence. 6 Kapilar, the towering poet of 'the Augustan age of Tamil literature' was a great friend of Pari. This poet was born at Tiruvadavur situated in the south Parambanad.7 It is possible that temperamental affinities and territorial patriotism bound the poet and his patron in an indissoluble union.

 ' தழுவு செர்தமிழ்ப் பரிசில் வாணர் பொன் பத்தொடாறு நூருயி ரம்பெறப் பண்டு பட்டினப் பாலே கொண்டதும்'

—கலிங்*தத்துப்பாணி*, 198.

பாரி ஒரி நள்ளி எழினி
 ஆயே பேகன் பெருந்தோள் மலேயனென்ற எழுவர் — சூ 125.

^{5. &#}x27;கொடுக்கிலாதா'கூப் பாரியே யென்று கூறினும் கொடுப்பாரி**ஃல**் — திருப்பு**தலூ**ர்ப் பதி**கம்.**

^{6.} South Indian Inscriptions, Vol. VIII, p. 227.

^{7.} Ibid., p. 222.

Another nobleman of the 'Illustrious order of Seven' honoured in songs is Adikan or Adikaman. He ruled over a considerable extent of territory between the Pennar and Vellar. The fortified city of Takadur, the modern Dharmapuri, in the Salem district, was his capital. He appears to have been generous to a fault. His gift of an ambrosial fruit to the poetess Avvai in grateful appreciation of her poetic genius elicited universal admiration. His territory was invaded by a powerful Chera king who succeeded in destroying the fortified city of Takadur. In honour of his signal victory the Chera styled himself "the conqueror of Takadur" and his military exploit forms the theme of an ancient Tamil poem entitled "Takadur Yattirai."

The memory of Adikaman survives in the names of cities either founded by him or in his honour. Five miles south of Dharmapuri there is a place called Adaman Kottai which is obviously a corruption of Adikaman Kottai. 'The outline of the old fort wall still exists and the position of the temples within the ramparts indicates the former extent of the town.' Possibly, Tiruvatikai, the modern Tiruvati, on the river Gadilam, which is associated with the devoted services of the saintly sister of Tirunavukkarasar, is a classical abbreviation of Adikanur, the city of Adikan."

The inimitable generosity of Kumanan of Kongunad has endeared him to the high and the low alike. This great

- 8. 'அமிழ்து விள நீங்களி ஒளவைக்களித்த அரவக் கடற்றுளே அதிகன்' — செறுபாண், 101
- 9. 'தகடூர் எறிந்த பெருஞ்சேரல் இரும் பொறை' என்ற பெயர் சங்க இலக்கியத்திற் காணப்படும்.
- 10. Gaz. Salem, p. 196.
- 11. 'அதிகைக் கெடில வீரட்டானத் துறையம்மானே' —திருநாவுக்கரசர் தேவாரம்

man deprived of his estate by the greediness of his wicked brother and wandering in the jungle as an exile was found by a poet in dire need. The pathetic words in which the poet pictured his poverty melted his heart.¹² He handed his sword to the poet and meekly offered his head on which his brother had set a price, for the relief of his unmerited poverty The poet was stunned by the offer. Sword in hand he rushed to the cruel brother who banished such a noble soul. described the incident in moving terms and reconciled the brothers. The place known as Kolumam in the Coimbatore district is considered to be a corruption of Kumanam called after his noble patron.¹³ The poet who has enshrined his fame in immortal verse is Peruntalaicattan. The prefix in the name probably denotes the place of the poet. Peruntalai was the original name of the village now called Peruntalaiyur in Coimbatore.14

This golden age of royal patronage passed away and it was followed by a period of apathy and confusion, which was deplored by the great seers. During this period the principal religions of the Tamil country were preparing for a battle royal. The validity of the Jaina and Buddhistic doctrines was challenged by the Saiva and Vaishnava

^{12. ்} புறம். 164, 165.

^{13.} I. M. P. Vol. I, p. 563. Kolumam in Karaivalinadu is eleven miles south-east of Udumalpet. Sewell's Antiquities, p. 222.

^{14.} It is probable that Peruntalai, denotes the place of the poet, just as Cittalai is associated with another Cattan and Kalattalai with another Sangam poet. The village Peruntalaiyur is 20 miles north east of Satyamangalam (Coimbatore). There is an old Siva temple with many inscriptions on the walls one of which is dated the 23rd year of Sundara Pandya Deva's reign. Ibid, p. 216.

saints which provoked 'the great war of religions.' The saints toured the country from one end to the other, singing sacred hymns at every shrine and infusing religious fervour in the masses. They lifted the mind of men from material pursuits to the gracious feet of the Lord, and exhorted those who had the gift of poesy to sing the praise of the Maker and not of the mortals.15 Thus they ushered into existence what may be called the age of spiritualised poetry, which was naturally succeeded by the age of philosophy. Religious institutions were started for the conservation and propagation of spiritual knowledge. The kings and nobles deemed it an act of great religious merit to construct new temples or renovate the old fanes glorified in the sacred hymns. Thus came into existence the great temples of southern India, the architectural beauty of which command the admiration of the modern world.

The advent of European civilisation and especially the spread of English education shifted the emphasis from religion and philosophy to arts and science. Eradication of mass illiteracy and encouragement of higher learning and research are now deemed more beneficial to the community than the construction of temples and establishment of charitable institutions. This time spirit is reflected in the songs of the popular Tamil poet of the modern age. 'Better far' says Bharathi, 'to initiate a poor soul in the rudiments of knowledge than to endow a thousand choultries and erect

^{15. &#}x27;வள்ளல் புகழ்ந்து நும் வாய்மை மிழக்கும் புலவீர்காள்! கொள்ளக் குறைவிலன் வேண்டிற் றெல்லார் தரும் கோதிலென் வள்ளல் மணிவண்ணன் றன்னேக் கவிசொல்ல வம்மினே? — திருவாய்மொழி 'பொய்ம்மை யாளரைப் பாடாதே எர்தை புகலூர் பாடுமின் புலவீர்காள்? — சுர்தார் தேவாரம்; திருப்புகலூர்ப் பதிகம்.

ten thousand temples.'16 The religious institutions of southern India are slowly adjusting themselves to the conditions and requirements of the modern times. The enlightened head of the Tirupanandal Mutt has initiated the admirable policy of awarding an annual prize to the best Tamil scholar of the University of Madras.¹⁷ The foundation of a residential University near Chidambaram offering instruction in all that is best in the culture of the east and west, marks a new epoch in the cultural history of the Tamil country. In grateful appreciation of the generous gift of the Rajah of Chettinad which brought the University into existence, the temple of learning and the sacred place where it is situated are named after him. proximity to the sacred hall of Cirrambalam where the mystic dance of the Lord explains the principles of cosmic life, the Annamalai University will stand for all time as the source of light and inspiration to countless generations of students and lovers of learning.

16. ' அன்ன சத்திரம் ஆயிரம் வைத்தல் ஆலயம் பதினுயிரம் நாட்டல் அன்ன யாவினும் புண்ணியம் கோடி ஆங்கோர் ஏழைக் கெழுத்தறிவித்தல்'

—பாரதி தால், பக். 126.

17. His Holiness Srilasri Kasivasi, Swaminatha Thambiran Swamigal Avergal of Tirupanandal has made an endowment yielding an annual interest of Rs. 1,000 "which is paid in cash to the candidate who stands first in the first class in Tamil in the Oriental Title examination (Vidwan Final) with Tamil alone as the subject." The prize is styled as 'King George V Memorial Tamil Prize."

THE IDEA OF AN INDIAN UNIVERSITY.

By

T. N. SIQUEIRA, S.J.,

The Sashtiabdhapurthi of Sir Annamalai Chettiar deserves more than the customary recounting of a kind man's benefactions. He has used his great wealth not in scattering largesses to deserving causes but—without altogether neglecting other appeals for his help—in one very definite kind of philanthropic work, in fact the one which deserves the name if any work does, for it aims at making men: higher education. He has founded and maintained a university in the twentieth century! And though the Government has donated an equal 20 lacs of rupees towards its foundation and an annual grant of a lac and a half, the initiative of this noble project came from this great son of India.

The Annamalai University was the result of a long-felt need of a centre of higher learning in the Tamil Nad. A state university was eagerly asked for by the advocates of Tamil culture but the attraction of the established order and the fear of a loss of prestige in a smaller and less extensive university prevailed. It was at this time that Sir Annamalai came forward and offered to found and keep up a unitary residential teaching university.

That was in 1929. Twelve years have passed, and the Annamalai University has grown in numbers and prestige till it has about a thousand students and its degrees are not considered inferior to those of other universities. It might therefore be a not unworthy way of honouring its founder to examine how far it embodies the idea of an Indian University.

Ι

Newman has for all time embalmed in his measured prose the true Idea of a University. That ideal—of a school of universal knowledge acquired by the study of literature and art and of all the sciences in their due degrees rising up to theology their queen—is true of all times and places because it is based on the very nature of things. A university, in any part of the world which is fit for one, ought to be in some way universal, as far as circumstances allow (not less) reflecting the manyfacetedness of God's own knowledge and the manykindedness of mankind. It does not, therefore, seem that there can be such a thing as an Indian university as distinct or different from an American or African or German university, for there cannot be a limited university.

But if there is no limit to a university's scope in regard to persons as well as subjects, there is a difference of approach and of spirit a difference of emphasis, which corresponds to and is an effect of the difference of climate, surroundings, history, economic condition. culture (which includes art, philosophy, language, religion, customs and manners) of each university's area. In studying the same Economics, for example, a different emphasis will inevitably be placed in an agricultural area like Travancore or Mangalore from an industrial part of the same country like Ahmedabad or Calcutta; and, taking India as a whole, a different spirit will inevitably pervade the teaching of, say, English poetry here from what would in Japan or France.

This obvious but seldom understood fact could be expressed in terms of a country's personality. Just as each individual boy or girl, though possessing the same human nature, possesses it in a different way (i.e. in a different proportion between the various faculties of body and soul which make up human nature), so too though all nations are made of men each has a different history, a different sum-total of experiences down the ages-geography and climate, food, wealth or poverty, occupation, art, conquest and independence, trade and communications, sophy, religion etc. Every element of environment, in fact, and every event favourable or unfavourable moulds and completes and thus changes the personality of a people no less than of an individual. The Indian of 1941 is certainly not the same as the Indian of 1931, and still less is he the same as the African or the New Zealander or the Dutchman of 1941 or of 1931.

It is unintelligent and beside the point to ask which nation or individual is superior. They are different—the experience. and better their longer and richer more complex their 'personality'. better and the But most of this does not depend on them, for it is the work of extrinsic causes. The consequence for education is that just as each child has to be educated in terms of his own personality, so too each people has to be educated in terms of its own personality—taking this word in the less strict but no less true sense I have explained.

This does not mean that what is taught and learnt by each nation (or individual) should be different, but that the way it is taught and learnt, the emphasis on the different elements which enter into the process, the approach to the faculties, the spirit of the entire undertaking should be different and adapted to each different 'personality'.

Applying this to university education, with which we are chiefly concerned here, it means that there should be in an Indian university a distinctly Indian spirit, an Indian method of approch to universal knowledge. There should, of course, be no restriction of knowledge to things Indian, for that would be the very negation of education, whose property is to broaden and deepen the wells of our common human nature. But the processes of knowledge should begin from things known—i.e. Indian—and not from unknown quantitics; what is under our very eyes and before our very doors should be first observed at first hand and recorded and impartially examined and only then should our conclusions be compared with those of visitors friendly or unfriendly, partial or impartial.

II

My idea of an Indian university is that it is a seat, besides other subjects, of the study of Indian history in a firsthand and thorough way. Is it not a standing disgrace to the nearly-a-century-old universities of India that the only largescale Indian History so far attempted has been in Cambridge? And perhaps even a great disgrace is that Indian History is not even a compulsory subject in the History groups of Indian universities and, at any rate, is not as popular as English or Greek and Roman History? The Patna University has recently formed a plan for the bringing out of a serious History of India. But there will be many a pause in the work for want of continued support and appreciation of the importance of the undertaking. Indeed, the writing of a competent and first-hand History of India requires a thorough re-research and re-study of each period and should therefore be portioned out among the different universities, so that each Province may study at close quarters the events in which its own past was chiefly forged and the whole of India. A body such as the Inter-University Board or an All India Editorial Board, may co-ordinate the work of the various Universities and bring out a History of India worthy of India.

In this work of research and collaboration the Annamalai University would have to play an important part. Being as it is the only residential university of the Tamil Nad and situated near some of the most interesting sites in all history, it is a duty it owes to India to ascertain and make known the facts of the past as they were and drew the right lessons from them. Messrs. C. S. Srinivasachari and R. Sathianathan have indeed done some work in this direction. But how little interest and encouragement has been shown to them and how few facilities have been given them for actual research as distinct from mere teaching! When highly paid scholars from foreign universities covet the riches of our history, is it not regrettable that our own able and willing workers are so few and so little encouraged? If an Indian university does not do this work, what university will?

The scientific teaching of the Indian languages, too, is an important part of an Indian university's duty. These languages contain treasures of literature and philosophy and even in their earliest works reveal a real genius for synthetic and rounded thought. And yet Sanskrit is still in many ways an undiscovered mine and its riches are hardly suspected by the vast majority of Indian graduates. It is left to Schooenhauer and Max Muller and Rhys Davids and F. W. Thomas to grow lyrical over India's heritage while Indian universities are content to praise Sanskrit and starve Sanskritists. If the Bhandarkar Institute were transplanted, to Harvard it would get

much more concrete encouragement than it does in Poona in spite of the ungrudging services of men like V. S. Sukthankar. If a critical edition of the *Mahabharata* were decided upon in any other country it would not languish for want of support as it does in the one country which can call itself Bharatayarsha.

And the Annamalai University, which is the university of the Tamil Nad has the sacred trust of studying and developing the Tamil language. This ancient and supple language is rich in possibilities; it has to be bent to modern needs of quick communication, science, public life. Where can a body of able scholars be found fit and willing for this great task—on which the progress of the Tamil Nad and through it of all India depends—if not in the nearest approach we have to a Tamil Nad University? If the staff is so burdened with the work of ordinary teaching that it has little energy left for research and creative writing, the very primary purpose of an Indian university would seem to be defeated.

It is not in this direction, therefore, that retrenchment is needed. If it were at all needed, it might more easily be made in those Departments which do not distinguish an Indian university from a European or an American, or which do not distinguish a university in South India from one in Bengal or Bombay. The note of universality of courses (universitas rerum) should of course be kept. But is it more costly to preserve in the twentieth century than it was in the Middle Ages when Paris, Bologna, Oxford and Cambridge, Nalanda and Takshasila first embodied the idea of a university?

Another subject which one expects to be taught and studied in an Indian university is Indian art. In the welter of foreign imitations in music, painting, dancing and

architecture which have followed in the wake of western education, India's special contribution to the world's art is in danger of being smothered by her own children. The debasement of Indian music, Carnatic as well as Hindustani or Bengali, by the depraved taste of the groundings in the cinema has been frequently pointed out in the Press -but in vain. The introduction of cheap foreign instruments (like the harmonium) which are out of keeping with the spirit of our music, has aslo been deplored by true musicians in vain. The style of dancing, building and painting has also been affected by unthinking imitation of uncongenial foreign models. Against all these evils it is the function of an Indian university, with its staff of experts and its atmosphere of detachment from sordid gain and the confidence it enjoys with the public at large, to fightnot by vapid denunciation which provokes a denser cbstinacy, but by positive study and demonstration of the beauty and adaptability to modern conditions of Indian artistic motifs.

Ш

Of the spirit of an Indian university it is easier to feel than to speak. It consists in a general attitude of appreciation and respect for things Indian, a general initial disposition to examine them fairly and improve them if possible rather than condemn and disown them out of hand, an enlightened love which wants the true good of the country and is not stopped by petty partisanship or narrow provincialism in acknowledging and correcting wrong. Such a spirit seems to exist, to a certain extent, at Santinikatan where one breathes the atmosphere of India in the mango groves, the open-air classes, the frescoed library, the Kala Bhavan. There is something of this spirit in the Annamalai university, too, and especially in the recently opened

school of Indian Music where in sound-proof rooms strains of vocal and instrumental Carnatic music are produced from early morning till late at night.

More than all this, however, the Indian University should draw to itself and keep as in one family teachers and students from every race and province and language and religion, so that living and working together they may grow in self-knowledge and mutual knowledge and appreciation. In a well-known but never sufficiently known passage in *The Idea of a University* Newman says:

"If I had to choose between a so-called University which dispensed with residence and tutorial superintendence and gave its degree to any person who passed an examination in a wide range of subjects, and a University which had no professors or examinations at all but merely brought a number of young men together for three or four years and then sent them away....if I were asked which of these two methods was the better discipline of the intellect....if I must determine which of the two courses was the more successful in training, moulding and enlarging the mind, which sent out men the more fitted for their secular duties, which produced better public men, men of the world. men whose names would descend to posterity, I have no hesitation in giving the preference to that University which did nothing, over that which exacted of its members an acquaintance with every science under the sun."

This may seem strongly said. But it points a lesson which we in India need more than anywhere else, for our name is Disunion. Our universities should therefore above all insist on the *universities personarum*—the living together of different students and teachers, eating together, playing, discussing, studying and writing together, so that mutual knowledge may breed

appreciation which casts out mistrust. mutual removal of communal mistrust, which the chief and perhaps only obstacle to India's progress. our universities must play the greatest part. For it is there that the future leaders of India are formed. And mutual confidence, without which no democratic government can stand, can neither be brought nor commanded but must be patiently deserved—by common life. The value of hostels and, above all, of hostel life (which means as much common life as is possible) cannot therefore be overstressed in any scheme of university education. School boys and girls may be too young to profit by a full measure of hostel life. But in the university the mixture of different students and professors on a familiar and equal plane is essential more than anywhere else in a country as vast and heterogeneous as India is.

The place of a residential university in India is therefore very high. The smoothing over of religious. communal, and caste differences which the Annamalai University has achieved in a few years in the heart of the Tamil Nad would alone more than justify its existence and even the gratitude of India to its founder, even if it did nothing for the advancement of research and higher learning. But it has done much more, and it has much more to do still for the fulfilment of the idea of an Indian-and particularly a South Indian-University. It has to cultivate in its alumni those habits which mark the truly educated man-the spirit of impartial inquiry and calm examination, the spirit of understanding and independent judgment, the spirit of openmindedness and appreciation of whatever is true and good and beautiful wherever it may be found, the spirit of universal love and service towards God and men. Sir Annamalai will have the consolation of having made all this possible.

UTILISATION OF SOME OF THE AGRICULTURAL WASTE PRODUCTS IN SOUTH ARCOT DISTRICT

By

M. L. SITARAMAN, M.Sc.

AND

S. Aravamuthachari, M.Sc.

There are vast possibilities in this district for preparing agricultural and vegetable products for more profitable export. A lot of work is still to be done, in improving agricultural methods, for co-ordinating labour and capital, and for starting new mills and cottage industries, to cope adequately with the agricultural resources and to provide work for the mainly agricultural population for more months in the year.

Paddy, groundnut, sugar-cane and cashewnut constitute a few of the most important agricultural produce of South Arcot district. The methods at present in vogue for preparing the produce for the market are far from satisfactory. Also, paddy husk, cashewnut shell, groundnut shell and bagasse are still to-day wasted or burnt uneconomically as low grade fuel. In some places only an attempt is made to extract the corrosive liquid from the cashewnut shell by antiquated, crude and highly inefficient charring processes.

Casuarina and croton sparsiflorus are two other unexploited potential resources. The climate and backwater soil are ideal for casuraina (Casuarina equisetifolia). The

ubiquitous croton sparsiflorus is as much of a pest to the agriculturist as the water hyacinth (Eichorina crassipes) is in the Bengal province, Tanjore and South Arcot districts. The seeds of the plant provide a high grade drying oil of commercial value.

We are not concerned so much with the agricultural methods in this district which here as elsewhere in the province leave much scope for improvement. The bulk of the agricultural population consists of small land holders, poor, conservative and incapable of following the expert experimental advice of the Agricultural Department. To give only one example, the annual loss to the Madras Presidency due to poor quality of exported groundnuts has been estimated at 52 lakhs of rupees.¹

About 40% of acreage in this district is under rice cultivation. Rice bran is rich in vitamin B complex and in mineral salts especially manganese. At present the bran is used only as cattle food. If industrial solvents are available at cheap rates it is possible to extract the oil out of the bran and use it in soap industry. Bran could be concentrated and standardised and vitaminised food products manufactured from it. Experiments have shown that charcoal from paddy husk would be as efficient as bone-charcoal in the clarification of sugar cane juice. The essential quality in an adsorptive charcoal is high porosity which is found in this charcoal. The ash from this husk contains about 90% of silica and 7% of calcium oxide and has never been tried for the manufacture of glasses, silica wares and silica gel. If experiments with this ash should prove suc-

1. Groundnut by Dr. B. V. Narayanaswami Naidu and Hariharan (Annamalai University Publication).

cessful, paddy husk would prove to be a cheap source of pure silica. Nature separates for us pure silica through the rice plant; it would be impossible to economically purify clay and yet we have been allowing paddy-huskash to go to waste.

Groundnut is the second important agricultural produce of this district and about 28% of the total area is under cultivation (425,725 acres in 1938-39). South Arcot of all districts in the Presidency stands unique as the largest producer of groundnut, the loose soil being best suited for its cultivation. The bulk of groundnut is exported after decortication. A moiety only of the kernels is worked by crude presses for the valuable oil. The hulls which constitute 29% of the pod contain 17-20% of furfural yielding material, that is, mainly Xylose, a reducing sugar, which can easily be obtained by extraction with 0.2 N sulphuric acid. The average composition is as follows:

Moisture	4.69%
Ash	3.16%
Ether extract	3.22%
Pentosans	16.03%
Reducing sugar	1.63%
Cellulose	50-60%

We would recommend the utilisation of the hulls for the preparation of activated charcoal, furfural, paper pulp and other cellulose products. We can but mention a few of the many uses and modern industrial applications of the groundnut oil which in our presidency has been used mainly as an adulterant of ghee and sesame oil. Apart from the manufacture of a poor quality of soft soap, hydrogenated products, margarine, rubber substitutes, lubricating oils, motor fuel and glycerine could be prepared from the oil by

suitable processes. Due to the present war India has been deprived of markets (Germany, Italy and Netherlands) consuming nearly 8 crores of rupees worth of groundnuts. We would therefore urge the importance of a hydrogenation plant at Mettur in conjunction with the alkali industry as the by product hydrogen is sufficient to hydrogenate 16 tons of groundnut oil per day to start with. The glycerine content of the oil is next only to that of cocoanut oil and dynamite glycerine can easily be manufactured from it. Also claims have been made for the application of India rubber substitutes prepared from groundnut oil in the manufacture of dynamite itself, in place of kieselgur. Besides the nitrated oil mixes easily with nitrocellulose. According to Chopra, groundnut oil is comparable with olive oil as a nutrient and food, and can be given in wasting diseases. In our opinion it is more palatable than olive oil; artificial ghee, closely simulating the natural product, can be prepared from the oil by incorporating the vitamins, diacetyl and ethyl butyrate in standard amounts and the food value thereby considerably enhanced.

The cake (groundnut meal with oil content of 5-8%) can be used as a substitute for wheat flour for the manufacture of bread, delicacies and biscuits. It is a valuable cattle food with the highest protein content 46.4%. The cakes from damaged and mouldy nuts alone, need be used as manure. The easily extractable protein of the cake can find application as a binding medium in the paint industry and for the preparation of distempers and other decorative paints.

Cashewnut shell contains about 50% of a corrosive liquid. The amount of the shell which is exported from South India is enormous as the following figures will show:

1923 Export to America from South India 1,00,000 lbs. 1937 Export to America from South India 27,000,000 lbs. 1938 Export to America from South India 58,000000 lbs.

Newer methods of extraction with hot oils are more efficient and 50% of the available shell liquid is extracted thereby from the highly honeycombed shells. Steadeler in 1847 extracted the liquid from the shells with ether and later workers have shown the principal constituent of the liquid named Cardanol to be a valuable phenol. Polymerisation products of this liquid find a variety of applications, including insulating varnishes, dyes and cold setting cements.

The oil from the cashewnut or the cashewnut kernel oil as it is popularly called, has been studied fully but is of little interest on account of the fact that the cashewnut is relished like almonds as a delicacy either in the raw state or with a little dressing.

The seacoasts of Southern India enjoy the heavy monsoon rains and an equitable climate (about 68° to 104° F) throughout the year. The soil in the west coast is suitable for the cultivation of the cocoanut; and the loamy soil in the east coast is best suited for the cultivation of casua-Dry distillation of casuarina wood does not seem to have been carried out in any large scale. The wood is either burnt as fuel or converted into charcoal by crude. Distillation wasteful process. ofthe wood in Bhadravati would make it possible to recover methanol, acetic acid and wood-tar. Also the yield and quality of the charcoal would be improved. It would be of interest to know that the price of this charcoal has risen in recent years and it has been found to be ideal for charcoal driven motors and lorries. With rationing of petrol the demand for casuarina charcoal is bound to rise very much. Besides, it has been reported that a brown dye could be extracted from its barks.

Croton sparsiflorus (Eliamanakku or Naimilakkae in Tamil) has been classified by botanists as belonging to the croton family. To the lay man it is apparently a misnomer being neither a beautiful croton nor sparse in flowers. Really it is an insidious pest and a terror to the agriculturist; it has constituted itself as a first class nuisance around roads, and railways supplanting the erstwhile cactus, in the municipal areas, in and around the villages. it is an outstanding eyesore threatening the beauty of the Indian landscape. However, the seeds of this hated dictator amongst weeds, which usually mature in the spring between February and April, were collected and investigated in the Annamalai University Chemical Laboratories. The seeds were found to contain 33% of a clear light yellow oil having the usual smell of drying oils. Iodine value of the oil is 172 (Wijs). Also it is quick drying. It is equal, if not inferior to linseed oil and could be put to the same uses as the latter. Also rubber substitutes, water-proofing material and paint vehicles could be manufactured from the oil as is usual from drying oils. The ash of the seeds also contain Calcium 20%, Potassium 14%, Phosphorus 29.8% and Nitrogen 4.9%. The seed cake will therefore be an excellent manure. The Agricultural Department of the Government of Madras in one of their communications refer to the manurial properties of the compost of this plant.

Lack of space restricts us from going in detail into the vast chemical potentialities of sugar cane refuse popularly called bagasse. The romantic juice of the plant has centered to itself the major attention of the sugar cane producer and the chemist. Also the cane growers have been content to burn bagasse in the wet or dried state as fuel to concentrate the sugar cane juice. It belongs to the bamboo (Graminaceae) family, a classical source of wood pulp. It is a pity that sugar cane plant especially the bagasse which is surely less refractory than the bamboo and easily more pliable after a necessary malleating and crushing process, has not been worked in South India as the raw material for first class wood pulp that it can be expected to furnish. Mention might also be made here of the use of the harder portions of bagasse in the production of light fire resisting material of the 'Heraklith' type. Moreover, the making of cattle feed with bagasse screenings and molasses as fodders has been experimented upon and found to replace the usual feeds like ragi straw.

It is no idle dream or Laputan phantasy to talk of isolating wood pulp from bagasse or groundnut hulls; of extracting silica from paddy-husk-ash or valuable motor spirit and aviation petrol by fermentation of molasses and by cracking groundnut and other fatty oils. We must point out that cheap hydroelectricity and the astounding improvements in chemical industrial technique have revolutionised the manufacture of basic chemicals and industrial products. Also the exigencies of the last Great War and the present world wide war have, if we might borrow an apt chemical word, catalysed industrial output. Thus the raw materials of a past century need no longer in all places be the raw materials of the present century. In the nineteenth century utilisation of waste products was necessary to sustain an industry and to make it economical and profitable; now the socalled waste products generally furnish new and important materials, so

that there is a chain of industries around the key industry. Often minor industries assume prominence and the main industries become less significant. In democratic America democratisation in politics has had its repercussions in democratisation of thought and of industry. For example, after common salt is removed from sea water. the mother liquor, formerly looked upon as stale, unprofitable and unworkable is now, in their hands, an important source of magnesium, a metal so vital in the elemental state or as alloys, for peace or for war. One of the biggest brains of India, Sir M. Visveswarayya, has recognised the necessity for industrialisation as the means of increasing the standard of living of the teeming millions of our country at the present day and the only salvation for India. 'Industrialise or perish' is his sage advice to the country at the present day, with its vast untapped mineral and vegetable resources. India like America is a subcontinent and there need be no fear of the markets becoming glutted with finished products. Our idea is that for a long time to come, India could well afford to consume the fruits of her own agriculture and industry. India should industrialise so that it may first be self-contained and self-sufficient. We fervently hope that eminent economists also would agree with our point of view.

THE WORD 'गोमण्डल ' AND COMMENTATORS.

By

K. A. SIVARAMAKRISHNA SASTRI.

In his standard and popular work on Indian Logic, the Muktavali, Visvanatha Pancanana classifies words into four kinds— योगिक, इट, योगइट and योगिकइट. As illustrations he cites four words—पाचक, गोमण्डल, पह्नज and उदिद the first comes under योगिक because it conveys an idea—a cook—only with the help of its derivative significance. The second गोमण्डल quite in contrast with the first conveys something without any reference to its etymological significance. The third पह्नज, when it means lotus, has the double signification होट and योग simultaneously. The last word उद्धि is capable of denoting two different ideas—a tree and a sacrifice—with the help of the two significations alternately operating.

Now what does the term गोमण्डल mean? Is it a इन्द्र compound to be split into गो and मण्डल or a single compound denoting a single idea? As it cannot be determined by the text itself we depend upon commentaries. Among those now available, the Dinakari, a very popular one, does not explain the word but only remarks that in many books the reading गोमण्डण instead of गोमण्डल is found, but it is an error.¹

'मण्डलादि' इत्यत्र बहुपुस्तकेषु 'मण्डपादि' इति पाठः। स प्रामादिकः।
 The Dinakari Balamanorama Edn. (1923), pp. 581-85.

Another Commentator, Sri Rayanarasimha, criticises Dinakara and tries to justify the reading set aside by him. He says that the word मण्डल taken as का means a country; but if it is taken as गीनिक it may mean somebody taking cream. In the same way the discarded मण्डल also may be taken as का when it means a tent or a canopy while it is equally capable of conveying the idea of a man tasting cream. Therefore neither of the two is to be preferred to the other. Further he suggests 'गनादिपदम्' as a satisfactory reading.² Ramarudra, a commentator on the Dinakariya does not agree with Dinakara in rejecting the reading मण्डल.³.

Now, forgetting the two commentaries for a while, let us examine the text itself which runs thus—

- (1) यत्र अवयवार्थ एव बुध्यते तद्योगिकम्। यथा पाचकादिपदम्।
- (2) यत्र अवयवशक्तिनैरपेक्ष्येण समुदायशक्तिमात्रेण बुध्यते तद्भुढम् यथा गोमण्डलादिपदम् ।
- 2. 'केचितु 'यथा गोपदमण्डलादिपदम्' इति मृलपाठअमेण '"मण्डलादि" इत्यत्र बहुपुरत्तकेषु "मण्डपादि" इति पाठः, सन्नामादिकः दस्याहुः। तदसत्, मण्डपपदस्य रूढपदोदाहरणत्वं न संमवतीत्याशयेन 'मण्डलादि द इति पाठः समर्थितः। तथाते रूढ्या देशविशेषवाचकमण्डलादिपदस्य मण्डं लाति इति व्युत्पत्त्या मण्डादानकर्तृवाचकत्वेन यौगिकरूढ-तया मण्डलपदस्यापि रूढपदोदाहरणत्वासंभवात्। तरमात् केषुचित् पुस्तकेषु 'मण्डलादि ' इति पाठः। केषुचित्पुस्तकेषु 'मण्डलादि ' इति पाठः। वाठत्रयमध्ये आध्याठद्वयस्यापि दुष्टत्वेन प्रामादिकत्वं परिकल्प्य निर्दृष्टत्वात् अन्त्यपाठ एव स्रीकार्य इति ।' प्रमा, Balamanorama, Edn. pp. 583-4.
- उ एवश्व मण्डपपदस्य गृहरूपार्थे रूढत्वसंभवेन न रूढमध्ये परिगणनान्तपपिति मन्तन्यम् ।

तरिक्रणी, B. M. Edn. p. 581.

- (8) यत्र तु अवयवशक्तिविषये समुदायशक्तिरप्यस्ति तद्योगरूदम् । यथा पङ्कजादिपदम् ।
- (4) यत्र योगार्थरूट्यर्थयोः स्वातन्त्र्येण बोधः तद्यौगिकरूटम् । यथा उद्भिदादिपदम् ।4

It must be noted that in each case, except in the second, the author gives only one illustration. In the second case two examples, according to the commentators, are cited. A glance at the text tells us that the author might not have found any necessity to cite two examples in this case alone and in all probability might have given only one example as in all other cases. It is also to be noted that Dinakara without giving any reason simply discards the other reading as spurious. Therefore we should find out the meaning of the term where which may help us in maintaining the propriety of the text and in justifying Dinakara's remark on where the case, except in the second case.

We come across very many terms in Sanskrit like गोपुर, गोमेद, गोष्ठ, गोपुरा and पद्भव. The first means a tower, the second, a precious stone, the third a cattleshed, and the fourth and the fifth, two and six animals respectively. In all these cases the first part गो has entirely lost its significance. Hence we can freely use those terms along with any word and coin forms like अथगोष्ठ, गोगोष्ठ, उष्ट्रगोष्ठ, अथगोपुरा and उष्ट्रगद्दान. These terms which were once used strictly to mean cowshed, couple of cows etc., have gradually lost the significance of their part गो and become current coin in their loose sense. The great grammarian Katyayana

^{4.} B. M. Edn., pp. 581-8.

first treats गोष्ठ, गोयुग and षहगव as terminations to, be added to the pratipadikas (stems) like अश्व etc., and later considers them as compound words without any significance attached to their part गो5. Kaiyata, the commentator on Patanjali's Mahabhashya, going a step further, seems to have treated them as like तेल and प्रवाण.6 The word तेल is derived adding a Taddhita termination to the stem fas to mean gingelly oil. If this significance is to be rigidly followed, terms like सर्वतेल and इडग्रदातेल become contradictions. So we have to rely upon grammar to get the forms but not the meanings of জৰ. The second স্বাণ, generally used to mean skilful or well versed, is derived as प्रवृष्ट. वीणायान् (expert in Vina-a musical instrument). Therefore it goes without saying that the term अवीप in the expression loses its derivative sense and stands for ध्याकरणे प्रवीण use बीणायां प्रबीण without Hence we may skilful. redundancy.

In the light of the considerations urged above it is clear that we need not attach any value to a part of a com-

5. उपमानाद्वा सिद्धम् — उपमानाद्वा सिद्धमेतत् । गर्वा स्थानं गोष्ठम् । यथा गर्वा सद्भुष्ट्राणां ... गोयुगच् शब्दश्च प्रत्यमा न वक्तव्य इति । गोर्थुगं गायुगम् । यथा गोस्तद्भद्रष्ट्रस्य उच्ट्रगायुगम् । तैलशब्दश्च प्रत्यमो न वक्तव्य इति । प्रकृत्यन्तरं तिलशब्दो विकारे वर्तते । एवश्च करवा तिलतेलिमर्स्या सद्भावति ।

Patanjali on V. 2-29, Vol. III, Kielhorn, p. 376-7.

6. ब्युरपत्त्युपाय एव तिलानां विकारस्तेलिमिति। रूढिशब्दश्चायं स्नेहद्रव्यवृत्तिः तथा च साहस्याश्रयणमन्तरेण इङ्गुदीतैलादयः शब्दाः प्रयुज्यन्ते। यथा प्रकृष्टा वीणायो इति ब्युत्पत्तिमात्रं क्रियते। कोशलं त्वस्य प्रवृत्तिनिमित्तम्। तेन वाणायां प्रवीणः इस्पपि भवति। On Patanjali, (V. 2-29), Vol. III, Benares Edn., p. 72. pound in order to fix its meaning. Why not then we say that the word गोमण्डल also stands simply for मण्डल, without any value attached to its part गो, seeing that that word has the following accepted meanings: (1) the globe; (2) a multitude of cows? At the same time मण्डल also means 'a globe'. In contrast to this भूमण्डल and भूबल्य mean 'a terrestrial globe. It is further to be noted that in no Sanskrit lexicons do we find the word गोमण्डल, while गोमण्डल is found in some of them though its 2nd meaning 'a multitude of cows' and other derivative meanings alone are given. 10

The above observations enable us to infer that Visvanatha Pancanana and his commentator Dinakara treat the whole term गीमण्डल as conveying a single idea—the globe. This establishes the propriety of the text and justifies the remark of Dinakara that गीमण्डम in the place of गोमण्डल is erroneous. Do we still expect him to assign any reason for his rejection of the reading गोमण्डम? No; therefore the two commentators Ramarudra and Ramanarasimha do not seem to have caught the significance of the text, and of the remark of Dinakara.

V. S. Apte, Sanskrit English Dictionary (1922), p. 193.
 L. R. Vaidya Sanskrit English Dictionary (1889), p. 251.
 Sir M. Monier-Williams, Dictionary (1899), p. 365.

Sir M. Monier-Williams, ibid, p. 775.
 V. S. Apte, ibid, p. 409.

^{9.} V. S. Apte, ibid, p. 409.

^{10.} Taranatha Tarkavacaspati, Brahdabhidhana, Vol. IV,p. 2713. St. Petersburg Dictionary, p. 808.

THE TREFOIL DECORATION IN INDO-MEDITERRANEAN ART

By

THE REV. H. HERAS, S.J.,

Director, Indian Historical Research Institute, St. Xavier's College, Bombay.

Amongst the relics discovered at Mohenjo Daro and Harappa perhaps there is none that has been reproduced so much in modern books on ancient art and on Indian civilization than the fragment of a little image of a man whose head is surrounded by an ornamental ribbon, and whose body is covered with a cloth decorated with trefoil. (Fig. 1). He has almost always been described as a yogin, perhaps on account of the slight opening of the eyelids and the position of the eyes, without paying attention to the diadem-like

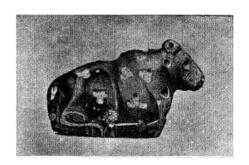
1. Marshall, Mohenjo Daro and the Indus Civilization, III. pl. XCVII; Mackay, Die Induskultur, pl. 20, (Leipzig, (1938); Mackey, The Indus Civilization, pl. H. No. 2; Mookerji, Hindu Civilization, p. 19. (London, 1936); Memoirs of the Archaeological Survey of India, No. 41. pl. 1: (Calcutta, 1929); Masson-Oursel (and others), Ancient India and Indian Civilization, frontispiece (London, 1934); Rawlinson, India, pl. i, (London, 1937); Coomaraswamy, History of Indian and Indonesian Art. pl. 1; Archaeological Survey of India, Annual Report, 1925-26, pl. xlii (Calcutta, 1928); Reau, Arts Musulmans, extreme Orient, p. 119, fig. 17 (Paris, 1939). Childe, New Light on Most ancient East pl. xxi, (London 1934); Mackay, la civilisation de l'Indus, pl. VIII. No. 2, (Paris, 1936); etc.



Fig. 1.

Bust of a proto-Indian King

—Archaeological Survey of India



 $\label{eq:Fig. 2.} Fig. \ 2.$ A Sumerian Bull decorated with Trefoil.



Fig. 3.

Man-headed bull from Sumer adorned with Trefoils,

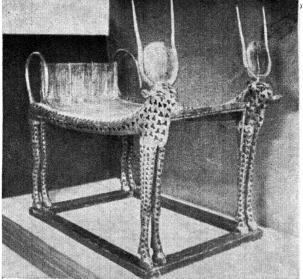


Fig. 4.

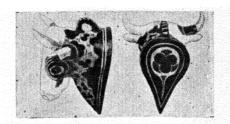


Fig. 5.
Minoan Bull Rhyton

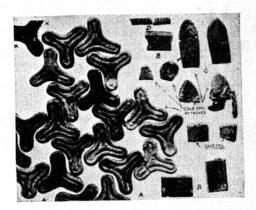


Fig. 6.
Trefoil faience inlays from Crete



Fig. 7.
Perseus killing the Medusa.
(Painting on an Attic jug)

ribbon that encircles his head nor to his richly decorated garb. A yogin in India has never used such beautiful apparel. The early person whose image we now contemplate, thanks to the labour of the Archaeological Department, was a king of the proto-Indian people, a Mina, "the shinning one," "a farmer of the Grab." The fillet or ribbon round his head was the real royal diadem, that bandha which was tied round the head when the pattabisheka of later times was performed. In the Assyrian poem of Gilgamesh, a Sumerian king of the city of Uruk, we read that his ancestor Utnaphishtim orders one of his servants to supply new apparel to Gilgamesh and among other things he also mentions this royal ribbon: "Be the band round his head made new." This ribbon was the royal diadem preserved by Greek and Roman rulers in their state functions.

The rich mantle over his shoulders was perhaps a ceremonial robe, a sort of priestly-kingly cloak, for both functions, religious and royal were united in him.⁵ Let us pay attention to the pattern that decorates this robe. It is the treble leaf, scientifically denominated *Trifolium*, and ordinarily called *trefoil*.⁶ That this design was not uncommon in

- 2. Cf. Heras, The Religion of the Mohenjo Daro People according to the inscriptions, J. U. B., V. pp. 25-26.
- 3. Cf. for instance S. I. I., XI, Bombay-Karnatak Inscriptions, I, p. 107, inscr. No. 110, l. 12, E. I., VII, p. 130; vv. 2-3.
- 4. Leonard, Gilgamesh, Epic of Old Babylonia, p. 71. (New York, 1934).
 - 5. Heras, op. cit., p. 26.
- 6. My confrere and colleague Rev. Fr. J. F. Caius tells me that there are in India three species of *Trifolium*: *T. fragiferum*, Linn. confined to temperate Kashmir; *T. pratense*, Linn. (Red Clover) that extends from Kashmir to Garwal at 4,000-8,000 ft.; *T. repens*, Linn. (White Clover) in the temperate and alpine Himalayas and

that early period, the existence of beads decorated with it among the proto-Indian relics sufficiently evinces. After all there was nothing extraordinary in the pattern. It could have been selected to decorate the royal cloak in the same way as any other beautiful design.

But if we now turn the pages of history a bit, we shall be greatly surprised to find the same pattern decorating three bulls hailing from Sumer.⁸ They are images representing the "bull of heaven," "the leading bull of the year," i.e. the first constellation of the solar year.⁹ (Fig. 2) One of these three bulls has besides the sun, the moon and a star—probably the morning star—on its back in the centre of the trefoils, that cover its body.¹⁰ Another specimen, which is now in the Louvre Museum has a horned human head after the fashion of the late Assyrian bulls representing the guardian spirits of the royal palace.¹¹ (Fig. 3). Was there any link between the trefoils of India and the trefoils of Sumer?

in the Nilaghiris. With no other indication than a trefoil sign it is impossible to identify the *Trifolium* suggested by the above decorative motif.

- 7. Marshall, Mohenjo Daro and the Indus Civilization, III. pl. CXVI. Nos. 40, 49, 53; pl. CLII, No. 17; Mackay, Further Excavations at Mohenjo Daro, pl. CXXXVII, No. 57; 66; pl. CXXXVII, No. 97; pl. CXXXVIII. No. I.
 - 8. Evans, The Palace of Minos, II, p. 261.
- 9. Sayce, Lectures on the Origin and Growth of Religion as illustrated by the Religion of the Ancient Babylonians, pp. 292-293. (London Oxford, 1897).
- 10. Wooley, The Development of Sumerian Art, pl. 55, a. (London).
- 11. Heuzey, Catalogue des Antiquites Chaldeennes, No. 136, (Paris, 1902).

Our inquiry will produce still more interest when we realize that this pattern has been used to decorate the images of the Egyptian goddess Hathor represented as a cow. on each side of the funeral couch of the famous Pharaoh Tutankhamen. (Fig. 4). Elliot Smith has explained at length how this celestrial cow, a totally "uncow-like creature," was placed on the sides on the Pharaoh's couch. Hathor was supposed to be the giver of life, the earliest of the great Egyptian Mothers, the divinity that had to give new immortal life to the deceased. "The object of the cowshaped couch was to ensure by magical means this translation of the deceased to heaven."12 Now these two images of Hathor in Tutankhamen's couch are lavishly gilded and fully decorated with lapis-lazuli trefoils of beautiful uniformity. Was there any special magical charm in this decoration of Hather in the funeral chamber of Egypt's sovereign?

Our suspicion is confirmed by the fact that we find the trefoil once again decorating a sacred object in Crete. Amongst the objects discovered by Sir Arthur Evans at the Little Palace of Knossos, there is a clay bull's head rhyton painted black and white. (Fig. 5). The most common device in this painting is the trefoil, which also finds a special central place at the back of the bull.¹³ The sacred use of these bull's shytons is well known. We have seen one of them equally decorated from Sumer. In India amongst the Saivas in relatively modern times receptacles with a bull's head outlet are not infrequent. Similar ones

^{12.} Elliot Smith, Tutankhamen and the Discovery of his tomb by the late Earl of Carnavon and Mr. Howard Carter, pp. 103-112 (London, 1923).

^{13.} Evans, op. cit., I, fig. 370; II, p. 536.

have been found in Egypt.¹⁴ The decoration at least of two such rhytons one in Sumer and another in Crete with the trefoil does not seem to be completely accidential.

Moreover, again at Knossos a number of trefoil faience inlays, some of them coated with gold foil were unearthed by Sir Arthur Evans. ¹⁵ (Fig. 6). The rich material used for these inlays, accidentally fallen from the piece they were decorating, shows the great importance of this pattern which we find once more used in the Greek classical period.

In an Attic jug of the middle of the 6th century B.C., now kept in the British Museum, there is a painting representing the slaying of the Medusa. Persus is actually thursting his harpe into the throat of the female monster (Fig. 7). He wears a fawn-skin over a chiton. That skin is decorated with a number of circles surrounded with dots, which are described as stars, and in their midst there is a clear specimen of a trefoil.¹⁶

Similarly on another Attic vase of the Louvre Museum goddess Athena is shown carrying a shield, the device of which is three treble leaves round a central circle.¹⁷ (Fig. 8). Again the *chiffon* worn by a *corai* (a maiden consecrated to religious service) of the same Museum is decorated

- 14. Flinders Petrie, Hyksos and Israelite Cities, pl. XXXII (London, 1906).
 - 15. Evans, op. cit., I, p, 451.
- 16. Woodward, Perseus. A Study in Greek Art and Legend, pl. 13-a (Cambridge, 1937); Harrison, Prolegomena to the Study of Greek Religion, p. 225, fig. 45 (Cambridge, 1908).
- 17. Corpus Vasorum Antiquorum, France 8, Louvre, III, Hg, pl. I, No. I.

with small circles grouped in threes in a trefoil fashion.¹⁸ Finally a silen painted on a vase of the Boston Museum has his forehead and bold head decorated with at least five visible trefoil signs.¹⁹

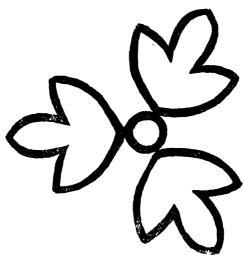


Fig. 8. Three trefoil device on Athena's Shield (Attic Vase of Louvre Museum)

Going further west we come across the same decoration in an Etruscan mirror. (Fig. 9). The main figures of this work of art are Apollo and Dionysos between whom one sees the head of the sun surrounded by a circle of rays. Above this group and walking to the left there is a huge panther that has a small animal in its mouth. The whole body of the feline is decorated with spots arranged in trefeil groups. Only once four points have been grouped in-

^{18.} De Rider, Les bronzes antiques du Louvre, I, Les figuarines, No. 236, (Paris, 1913).

^{19.} Boston, No. 10, 179: Beazley, Attic Red-figured Vases in American Museums, p. 82, fig. 50 bis (Cobridge U. S., 1918).

stead of three.²⁰ What the symbolism behind this brute is we are not able to say. It is the constant companion of Dionysos and the Maenads even down to the classical period. Dionysiacal panthers decorated with trefoils and at times with quatrifoils may be seen in an Etrusean tomb at Tarquinia,²¹ on a painted vase of the Museum of Munich.²² and on a stamnos of the British Museum.²³

The same trefoil three dot arrangement is used to decorate the cloth that covers the lower part of the body of Apollo in a vase painting of the Hermitage Museum of Petrograde.²⁴

The trefoil in Crete developed into a quatrifoil sometimes. A Mycenacan bull on a vase found at Cyprus (Fig. 10) has a number of trefoils on the upper and lower portions of its body. The quatrifoils form a central row. The front portion of the animal is covered with small crosses, which are the last development of the trefoil.²⁵

The same evolution we discover in the painting of a bull rhyton carried by a servant on a wall in the tomb of Men-Kheperra-serib, High Priest of Amon at Thebes. This rhyton has mixed trefoils and quatrifoils.²⁶

- 20. Gerhart, Etruskische Spiegel, pl. CCXCII; Harrison, Themis, p. 442, fig. 136 (Cambridge, 1912).
 - 21. Weege, Etruskische Malerei, p. 68. fig. 62, (Hall, 1921)
 - 22. Ducati, Storia della Cermica Greca, II, p. 330, fig. 247.
 - 23. B. M. stamnos No. E443; Beazley, op. cit., p. 55, fig. 35.
 - 24. Hermitage Museum Catalogue, No. 1807.
- 25. Corpus Vasorum Antiquorum, Great Britain, I, British Museum, II, C. b, pl. 7, No. 10.
- 26. Meyer, Fremdendarstellungen, pp. 596-600; Max-Muller, Egyptian Research, II, pl. I-XXII.



 $\label{eq:Fig. 9.} Fig. \ 9.$ Etruscan mirror with the figures of Apollo, Dion, Ysos and the Sun.

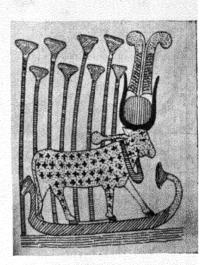


Fig. 11

Hathor decorated with quatrifoils
or crosses.

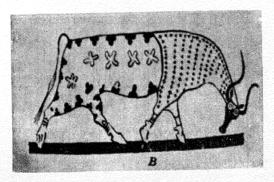


Fig. 10.

Bull decorated with trefoils, quatrifoils and crosses (Mycenaean Vase)

Consequently, the celestial cow Hathor also was decorated with quatrifoils or crosses in later specimens. (Fig. 11).

The trefoil decoration has also been found in Spain adorning the forehead of busts of the mother goddess unearthed in the vicinity of Alicante, on the eastern coast of Spain, and in Ibiza, one of the Balearic Islands.²⁷ The trefoil appears once more in a scrol-frieze, round a mosaic of the labours of Hercules, discovered near Valencia.²⁸



Fig. 12. Trefoil frieze round mosaic of Hercules' labours (Valencia, Spain)



Fig. 13. Trefoil frieze round church gate at Rubio, Spain.

(Fig. 12). This frieze is repeated round a romanesque gate of the Church of Rubio in Catalonia, built in the 13th century (Fig. 13).

- 27. Lafuente Vidal, Excavaciones en la Albufereta de Alicante (Antiqua Lucentum), fol. XI (Madrid, 1934).
 - 28. Rodenwaldt, Arte Clasico, p. 779 (Barcelona, 1933).

It is said that the Druids, who according to some authors were the priests of the nation prior to the Celts in France in England and in Ireland,²⁹ a nation which to all evidence seems to be Mediterranean, held the trefoil in great veneration.³⁰ In fact traditions connected with the life of St. Patrick inform us that he used the trefoil in order to explain the mystery of the Holy Trinity to the Irish pagans, a fact which seems to suppose that the trefoil was known to them as a religious symbol or object. Even now in some European countries the quatrifoil seems to have some superstitious beliefs attached to it. It is supposed to be a sign of good luck.³¹

What was the symbolism behind this simple sign?

The real meaning of the trefoil is still a mystery. One thing seems certain, that it must have a very high perhaps religious significance; for in the cases studied above, it is always found in connection with something sacred.

In Mohenjo Daro the priest-king who was the representative of god amongst the people, in Egypt the image of a goddess, in Sumer the heavenly bull, in Crete an object used for sacred purposes, in Greece the dress of a god and the shield of a goddess. Amongst the Etruscans a symbolic animal, the constant companion of a god; in Spain the headgear of a goddess, a mythological represen-

^{29.} Cf. Heras, "Quienes eran los Druidas?," Ampurias (Barcelona), II, pp. 17-32.

^{30.} Kendrick, The Druids. A Study in Keltic Religion, pp. 124-125. (London, 1927).

^{31.} De Gubernatis, La Mithologie des plantes, II, p. 360. (Paris, 1882).

tation and the gate of a Church. Further archaeological discoveries will perhaps enlighten us on this interesting subject. The trefoil looks like a trifle. Yet it may have a subline symbolism behind it.

In point of fact the triple leaf of the bilva tree, Aegle marmelos, is still much venerated in India and is dedicated to Siva in his three-fold function of creator, preserver and destroyer. The leaves of the vilva tree are placed on the linga to cool the heated deity.³² One of Siva's titles is Bilvadanda, i.e. "he who holds the staff made of Bilva."

The sacredness of this trefoil leaf may be guessed from the following story narrated in the Skanda Purana:

Once upon a time there was a hunter who was living in the region near the Himalayan mountains. One day while hunting he was overtaken by nightfall. In order to escape the wild beasts, he climbed a tree where he spent the night in great discomfort. Naturally he often shook the branches of the tree while changing his position, and at each motion of the branches many leaves were falling. Now, a linga happened to be under that tree and since the tree was a bilva, the trefoil leaves were falling over the linga. Siva is said to have been highly pleased. When a few days after the hunter died, Yama the god of death was put to flight after a violent quarrel and Siva carried the hunter to heaven. Later Yama complained to Nandi, Siva's vehicle and servant of the latter's treatment. Then Nandi replied: "This man has been a great sinner who had no scruple to shed blood; but before he died, he fasted,

^{32.} Martin, The Gods of India, A brief Description of their History, Character and Worship, p. 240 (London Toronto, 1914).

watched, and offered bilva leaves to the linga. This action has cleansed him from his sins."33

Some statues of Saiva saints and devotees are represented with a jata-makuta, or hair head-gear, ending in a trefoil (Fig. 14). In modern times images or painting representing Siva or his linga are often associated with the three leaves of the bilva (Fig. 15). Even Vishnu and Krishna are sometimes shown with a trefoil, or three peacock feathers joined in the shape of a trefoil, upon their makuta (Figs. 16 and 17).

Sir Arthus Evans has tried to explain the appearance of the trefoil decoration in Minoan Art by showing its plastic evolution from the intersection of three C's.³⁴ Yet we may now state that the trefoil decoration did not originate in Crete, as it existed before in India, in Sumer and in Egypt. After considering the religious connections of this motif throughout the Indo-Mediterranean civilizations, we are of opinion that the trefoil is a symbol of the divine triad, God who is one and who is three,³⁵ a tenet which persistently exists in all those civilizations as if it were the religious heirloom of the race.³⁶

^{33.} Ibid., pp. 174-175. Cf. Skanda Purana, III, 3, Adh. 2, vv. 31-32; Gupte, Hindu Holidays and ceremonials with Dissertation on Origin, Folklore and Symbols, pp. 208-215 (Calcutta, 1916).

^{34.} Evans, The Palace of Minos, IV, pp. 314-315.

^{. 35.} Heras, "The Religion of the Mohenjo Daro People," J.U.B., V, pp. 16-18; Heras "Further Excavations at Mohenjo Daro," The New Review, IV, pp. 73-75.

^{36.} I shall explain the existence of this belief in all the Indo-Mediterranean nations in my work on The Religion of the Proto-Indians and its Evolution in the Mediterranean Nations.



Fig. 14.

A Saiva Saint with the trefoil on his head

-Museum of the Ind. His Research Institute, St. Xavier's College,

Shran Vishnu
Adan Shipan Jean, Moi Base, Many

Fig. 16.

Modern painting of Vishnu with a peaceck feather trefoil on the makuta.



Fig. 15.

Modern painting of Siva's Linga with
the three leaves of the bilva
on the background.



Fig. 17.

Venugopal with a peacock feather trefoil on the makuta.

RECENT DEVELOPMENTS IN INDIAN CURRENCY

By

Prof. V. G. Kale, M.A., Poona

I welcome this opportunity of contributing an article to the Commemoration Volume to be presented to the Rajah Saheb of Chettinad and thus of paying my tribute of appreciation of the large-heartedness and liberal mindedness of an old friend and colleague in the Council of State. Being away from headquarters for several days and having little free time at my disposal, I had to choose for this article a theme that appeared to be topical and was handy when I decided to sit down to write. Nevertheless, I feel that Indian currency is a fascinating subject and intrinsically of great national importance and no further apology is needed to justify the selection I have made of one small aspect of that large theme.

Even a superficial observer will have noticed that in Great Britain and in India, the authorities have been trying to take to heart the lessons taught by the experience of the last Great War in the matter of economic policies and, as far as practicable, to avoid what turned out to be mistakes twenty years ago. Problems relating prices, exchanges, currencies, taxes, rates of rest and public debt are being handled with but with promptness and decision caution light of past experience. This feature of the situaparticularly striking in the tion is field of currency and exchange and appeals with special significance to a person like myself who had to comment upon Indian currency policy in the central legislature and outside, during and immediately after the last War. The rupee-sterling exchange was put up then with every unfavourable development in trade and with every rise in the price of silver. There were ordinances and bans on the breaking up and transport of rupees, but all the coins that were poured into circulation vanished into hoards or melting pots, creating an artificial scarcity of money. This time necessary adjustments are anticipated and are promptly carried into effect and the control of exchange is more tight and satisfactory. We have now the comparative advantage that the control of the country's currency and credit is no longer divided as it then was but is unified in the hands of the Reserve Bank of India. In the last war inordinate demands for metallic currency defeated all efforts to supply it, including the issue of one rupee and two and a half rupee Let us see how a similar demand for currency notes. metallic currency on an abnormal scale has been met during the present war, without serious inconvenience to the public and to the authorities. The latest report on currency and finance issued by the Reserve Bank of India gives interesting information on this subject.

During the "busy season" in India, i.e., from September to March when commercial crops are being moved after harvests, notes and rupees are in demand for payment to cultivators and for financing of seasonal trade activities. During the other—viz., the "slack season"—there is movement of currency in the opposite direction and money returns to commercial centres through the channels of revenue collections and payment for manufacturers and so on. All the currency that flows out into the countryside does

not, of course, return in this way. The normal expansion of business activity and some hoarding absorb a small part of the currency which means an addition to the money that remains with the public. "The volume of currency in circulation usually reflects the incidence of the busy and slack seasons, rising and falling with their altera-Ordinarily the slack season is taken to start when currency begins to return about February or March and ends about September or October when return gives place to absorption of currency." (Report on Currency and Finance, 1940-41). This process of outflow and inflow of expansion and contraction and of absorption of paper and metallic currency is a normal feature of the business life of India. Abnormal conditions such as a serious disturbance in the country's balance of trade, a famine, a wide spread panic, changes in the supply or prices of the precious metals tend to cause violent fluctuations in the above seasonal process of currency distribution. last war some of these factors combined to produce huge absorption of rupees and led to grave embarrassment of Government who could not provide metallic currency in the face of abnormal rises in silver prices and the rapid disappearance of rupees from circulation.

How are absorption and return of currency calculated? Since the Reserve Bank of India took up the management of the currency "the variations in the figures of notes in circulation as given in the weekly returns of the Issue Department of the Bank are taken to indicate absorption or return. Notes in circulation now include the amounts held in the Government Treasuries as well as by the public, but exclude the holdings of the Banking Department of the Reserve Bank. The absorption or return of rupee coin means the decline or rise respectively in the

amount of rupee coin held in the Issue Department of the Bank." Since 1935-36 rupee coin does not include half rupees, which are shown under small coin and since 24th July 1940, rupee coin includes Government of India rupee notes. It should be noted here that the circulation of one rupee notes the right to the conversion of which into rupee coin was withheld from the public was an important measure adopted to stem the tide of the absorption of rupee currency.

On the outbreak of the War, it was noticed that a heavy demand, which was bound to be partly speculative and partly the result of increased business activity, should arise and that a larger amount than usual of notes and rupees should go into circulation. But the absorption of currency during the two years 1939-40 and 1940-41 was extraordinarily heavy amounting to Rs. 118 crores. This compares curiously enough, with a return of currency during 20 years ended 1938-39 of Rs. 68 crores! The following figures show absorption and return during 19 months of war up to March, 1941 and the 19 months before the war ended August, 1939:—

Absorption $= (+)$	_
Return = (-)	

(In lakhs of Rs.)

19 Months	Notes	Rupees	Small coin	Total includ- ing small coin
January, 1938 to August, 1939	4,39	— 22,54	- 6	- 26,99
September, '39 to March, 1941	+ 78,77	+ 52,76	+ 6,91	+ 138,44

The monthly absorption and return of currency are given in the following two tables:—

I 1939—40 (In lakhs of Rs.)

Currence Month		Notes	Rupee coin	Small coin	Total
April		- 38	+ 1	+ 14,	- 23
May		— 92	— 18	+ 7	— 1,03
June		3,18	-3,22	-18	- 6,68
July		– 6,20	-3,50	 27	9,97
August		+ 47	- 2,46	— 18	- 2.17
Sept.		+24,03	+ 33	+ 12	+24,48
Oct.		+7,38	+ 2,60	+ 33	+10,31
Nov.		+ 9,81	+ 3,04	+43	+13,28
Dec.		+15,81	+ 5,28	+53	+21,62
Jan.		+ 1.92	+ 3,37	+49	+ 5,78
Feb.		+ 1,71	+ 2,56	+41	+4,68
March	• •	1,00	+ 2,35	+32	+ 1,67
Total		+49,45	+10,08	+ 2,21	+61,74

II 1940—41 (In lakhs of Rs.)

Curren Month		Notes	Rupee coin	Small coin	Total
April May June July August Sept. Oct. Nov. Dec. Jan. Feb. March		+ 1,06 + 8,92 - 1,59 - 9,02 - 6,43 - 2,31 - 51 + 48 + 12,10 + 3,80 + 4,43 + 8,18	+ 2,56 + 6,81 + 15,12 + 5,18 + 3,62 +, 2,03 + 1,00 + 83 + 1,13 - 1,36 - 1,41 - 2,28	+ 29 + 46 + 46 + 42 + 25 + 20 + 39 + 22 + 46 + 47 + 38 + 31	+ 3.91 + 16,10 + 13.99 - 3.42 - 2,56 - 8 + 88 + 1,53 + 13.69 + 2.91 + 3,37 + 6,21
Total	••	+ 19,11	+ 33,28	+ 4,28	+ 56,62

From Table No. I above it will be seen that there was a huge absorption amounting to as much as Rs. 57 crores during the first four months of the war. In the succeeding months demand for currency in the shape of notes steadily declined but rupees continued to be in large demand obviously for hoarding. On the collapse of France in June, 1940, in particular, hoarding of rupees became a In June the absorption of rupee coin amounted to The return of notes in the three months. Rs. 15 crores. June to August was extraordinarily heavy and totalled nearly to Rs. 22 crores between 15th June and the end of August. Coin was freely issued to the public without limit, with the result that the holding of rupee coin of the Issue Department of the Reserve Bank, which had stood at nearly Rs. 76 crores on 1st September, 1939, dwindled to Rs. 35 crores in the third week of June, 1941, having fallen below the statutory limit of Rs. 50 crores by the end of May, 1940.

This scarcity of currency artificially created by hoarding had to be promptly faced. Government took two steps to meet the situation. Coin was to be supplied in exchange for notes only to the extent of the normal and reasonable requirements of individuals and refusal to accept coin or notes in payment of a debt or otherwise was prohibited. These measures produced the desired effect and the situation was finally eased with the introduction of the Government of India one rupee notes and the increased supplies of newly minted rupees. As it would have taken time to provide adequate supplies of new one rupee notes, notes which had been printed in 1935 to meet a possible contingency but which had not been actually used, were immediately put into circulation. These notes took the place of ruppee coin both for legal and practical purposes and the

Reserve Bank of India Act was suitably amended to rectify the position as regards its holding of rupees. New and larger sized issue of one rupee notes has now been put into circulation.

The short-lived demand for coin was not confined to rupees but extended also to small silver coins and to nickel and copper. The absorption of small coin in 1939-40 was the largest since 1919-20. The absorption of small coin during the first seven months of the war amounted to Rs. 2.63 crores. During the year 1940-41, the absorption reached record heights being Rs. 4.26 crores and there was no return of small coin in the slack season of the year. In the 19 months of the war period the absorption of small coin amounted to Rs. 6.9 crores whereas in the 19 months of the period before the war there had been a return of 6 lakhs of rupees.

Foreign exchange has been systematically controlled from the very beginning in the present war, both in England and in India, and the rupee-sterling rate has been steadily maintained. The balance of trade and the large balances which the Reserve Bank of India was enabled to have in London have facilitated the maintenance of the exchange at a fixed level. The problem, again, has not been complicated by a steady and abnormal rise in the price of silver as it happened in the last war. The heavy absorption of rupees and of small coins indicated the direction of the difficulties that might arise in this connection and prompt steps were taken to prevent possible undesirable developments. Two ordinances were issued one in July and the other in December, 1940 announcing that the fineness of the half rupee and of the whole rupee would be reduced from eleven-twelfths of fine silver and one-twelfth of alloy to one half of fine silver and one half of alloy.

These measures were obviously intended to prevent unnecessary waste of silver in view of large demand for coin and to discourage hoarding. The rupee and the small silver coin have thus been now reduced to the true status of token currency.

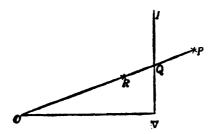
In a war like the present, reaching ever-widening dimensions, the importance of keeping the country's currency system on an even keel cannot be exaggerated and the brief account given above of the developments which have taken place in the domain of Indian currency and of the farsighted policy which the Government and the Reserve Bank have adopted with commendable promptness in connection therewith, is calculated to create a feeling of confidence in the public mind that the authorities concerned will meet every difficult situation as it arises, in the appropriate manner.

ON A PROJECTIVE TRANSFORMATION

By

P. Kesava Menon, M.Sc.

The focal properties of conics are usually studied by means of projections involving the circular points and circular lines. This paper is mainly an attempt to study those properties by a simpler projective transformation in a single plane. The transformation is then extended to spaces of higher dimensions.



Let O be a given point, and l a given line. Take any point P in the plane determined by the point O and the line l. Let OP intersect l in Q and let K be the harmonic conjugate of P with respect to O and Q.

If P moves along a curve C, R will move along a curve Γ which we shall call the 'transform' of C.

As an immediate consequence of the definition of the transformation we have

Theorem 1. All straight lines through O transform into themselves.

Let V be the foot of the perpendicular from O on l. Then, since P, R divide OQ harmonically, it follows that l bisects the angle PVR. Hence we have

Theorem 2. A straight line through V transforms into its reflection about the line l.

As a corollary to the above theorems we get

Theorem 3. The transformation preserves the angles at O in magnitude and sign and the angles at V in magnitude but changes the sign.

It is clear that the transform of any point on the perpendicular bisector of OV is at infinity; conversely, the transform of any point on the line at infinity lies on the perpendicular bisector of OV.

Therefore we get

- Theorem 4. The perpendicular bisector of OV transforms into the line at infinity; and conversely, the line at infinity transforms into the perpendicular bisector of OV.
- 2. Next we shall discuss the equations of the transformation. Taking O as origin and OV as the initial line, we

have, if (r,θ) , (r',θ) be the points P and R respectively, and OV=2c, then

$$\frac{1}{r} + \frac{1}{r'} = \frac{2}{QQ} = \frac{\cos\theta}{c} \tag{1}$$

If (x,y), (x', y') be the cartesian co-ordinates of P, R respectively, then dividing both sides of (1) by $\cos \theta$ and $\sin \theta$ separately, we get

$$\frac{1}{x} + \frac{1}{x'} = \frac{1}{c}$$
, and $\frac{1}{y} + \frac{1}{y'} = \frac{x}{cy} = \frac{x'}{cy'}$;

so that

and

 $x = \frac{cx'}{x'-c}, \quad y = \frac{cy'}{x'-c};$ $x' = \frac{cx}{x-c}, \quad y' = \frac{cy}{x-c}.$ (2)

Hence we have the

Theorem 5. The transformation is projective, so that the transform of an algebraic curve of the nth degree is a curve of the same degree. In particular, straight lines transform into straight lines and conics into conics.

Also, from (1) we have

$$\frac{r'}{r} = \frac{x'-c}{c} = \frac{c}{x-c} \tag{3}$$

Let the transforms of the points P_i (x_i , y_i) be P_i' (x_i' , y_i') (i=1, 2, 3) and let the radii vectors OP_i , OP_i' be denoted by r_i , r_i' respectively.

If, further, \triangle , \triangle' denote the areas of the triangles $P_1 P_2 P_5$, $P_1' P_2' P_3'$ respectively, then

$$\Delta' = \frac{1}{2} \begin{vmatrix} x_1' & y_1' & 1 \\ x_2' & y_2' & 1 \\ x_3' & y_3' & 1 \end{vmatrix} = \frac{1}{2} \begin{vmatrix} \frac{cx_1}{x_1 - c}, \frac{cy_1}{x_1 - c}, 1 \\ \frac{cx_2}{x_2 - c}, \frac{cy_2}{x_2 - c}, 1 \\ \frac{cx_3}{x_3 - c}, \frac{cy_3}{x_3 - c}, 1 \end{vmatrix}$$

$$= \frac{1}{3} \begin{vmatrix} cx_1 & cy_1, & x_1 - c \\ cx_2 & cx_3 & cy_2, & x_2 - c \\ \frac{2 \text{ II } (x_1 - c)}{i = 1} \end{vmatrix} cx_1, cy_1, x_1 - c$$

$$= \frac{1}{3} \begin{vmatrix} cx_1 & cy_1, & cy_2, & cy_3 \\ cx_2 & cy_3, & cy_3, & cy_4, & cy_4 - c \\ cx_3 & cy_4, & cy_4 - c \end{vmatrix}$$

$$= \frac{-c^3}{3} \triangle = -\frac{r_1' r_2' r_3'}{r_1 r_2 r_3} \triangle \qquad (by (3)).$$

$$= \frac{1}{3} \begin{vmatrix} cx_1 & cy_2 & cy_3 \\ cx_3 & cy_4 & cy_4 - c \\ cx_4 & cy_5 & cy_5 - c \\ cx_5 & cy_5 & cy_5 & cy_5 - c \\ cx_5 & cy_5 & cy_5 & cy_5 - c \\ cx_5 & cy_5 & cy_5 & cy_5 - c \\ cx_5 & cy_5 & cy_5 & cy_5 - c \\ cx_5 & cy_5 & cy_5 & cy_5 - c \\ cx_5 & cy_5 & cy_5 & cy_5 - c \\ cx_5 & cy_5 & cy_5 & cy_5 - c \\ cx_5 & cy_5 & cy_5 & cy_5 - c \\ cx_5 & cy_5 & cy_5 & cy_5 & cy_5 - c \\ cx_5 & cy_5 & cy_5 & cy_5 & cy_5 - c \\ cx_5 & cy_5 & cy_5 & cy_5 & cy_5 & cy_5 \\ cx_5 & cy_5 & cy_5 & cy_5 & cy_5 & cy_5 \\ cx_5 & cy_5 & cy_5 & cy_5 & cy_5 & cy_5 \\ cx_5 & cy_5 & cy_5 & cy_5 & cy_5 \\ cx_5 & cy_5 & cy_5 & cy_5 & cy_5 \\ cx_5 & cy_5 & cy_5 & cy_5 & cy_5 \\ cx_5 & cy_5 & cy_5 & cy_5 & cy_5 \\ cx_5 & cy_5 & cy_5 & cy_5 & cy_5 \\ cx_5 & cy_5 & cy_5 & cy_5 & cy_5 \\ cx_5 & cy_5 & cy_5 & cy_5 \\ cx_5 & cy_5 & cy_5 & cy_5 \\ cx_5 & cy_5 & cy_5 & cy_5 \\ cx_5$$

Thus we get

Theorem 6. If P₁, P₂, P₃ be three points with transforms P₁',P₂',P₃' respectively and \triangle , \triangle ' be the areas of the triangles P₁P₂P₃, P₁'P₂'P₃', respectively, then

$$\frac{\Delta}{OP_1'OP_2'OP_2'} + \frac{\Delta}{OP_1 \cdot OP_2 \cdot OP_3} = 0.$$

Consider a circle with centre O and radius a. Putting r=a in (1) we see that its transform is the conic.

$$\frac{a}{r'} = \frac{a}{\epsilon} \cos \theta - 1,$$

having O as a focus, the initial line as the transverse axis and whose semi latus rectum is a and the distance of the directrix from the focus is c. Hence we get the

- Theorem 7. Circles with centre at O transform into conics with a focus at O and the corresponding directrix common, the semi latera recta being equal to the radii of the corresponding circles. Conversely, a system of conics having a focus and the corresponding directrix common, can be transformed into concentric circles by a proper choice of O and the line l.
- 3. A number of interesting deductions can immediately be made. We give a few as illustrations.

Since the chords of a circle subtending a constant angle at the centre envelop a concentric circle, the point of contact of a chord with the envelop being on the bisector of the angle subtended by the chord at the centre, we get on transformation (using Theorem 3) the

Theorem 8. Chords of a conic subtending a constant angle at a focus envelop a conic having that focus and the corresponding direct-trix common with the given conic.

Further, the point of contact of a chord with the envelop lies on the bisector of the angle subtended by the chord at the focus.

If a polygon be inscribed in a circle and circumscribed to a concentric circle, then

the sides of the polygon subtend a constent angle at the common centre. Correspondingly we have the

Theorem 9. If a polygon be inscribed in a conic and circumscribed to another having one focus and the corresponding directrix common with the former, then the sides of the polygon subtend a constant angle at the common focus.

Moreover, the necessary and sufficient condition that a polygon of n sides be circumscribed to a circle of radius a and inscribed in a concentric circle of radius b is $a=b \cos \pi/n$.

Therefore we have

Theorem 10. The necessary and sufficient condition that a polygon of n sides may be circumscribed to a conic of semi-latus rectum a and inscribed in another conic having one focus and the corresponding directrix common with the former and whose semi-latus rectum is b is a=b $cos\pi/n$.

If in Theorem 6 we take P_1,P_2,P_3 on a circle with centre O and radius a, the area of the triangle P_1 , P_2 , P_3 , will remain constant if the sides subtend constant angles at the centre. Hence we immediately deduce

Theorem 11. If P₁, P₂, P₃ be three points on a conic such that the sides of the triangle P₁P₂P₃

subtend constant angles at a focus, O, and if \triangle denotes the area of the triangle $P_1P_2P_3$, then

$$OP_1 \cdot OP_2 \cdot OP_3$$
 is constant.

Since the maximum triangle inscribed in the circle is equilateral, it follows that the maximum value of $\frac{\Delta}{\text{OP}_1 \cdot \text{OP}_2 \cdot \text{OP}_3}$ is attained when the sides of the triangle

subtend the same angle at O, and is then equal to $\frac{3\sqrt{3}}{4a}$, where a is the semilatus rectum.

A circle with centre at the midpoint of OV has its equation in the form

 $(x-c)^2 + y^2 = a^2$. This by (2) transforms into

$$\left(\frac{cx'}{x'-c}-c\right)^2+\left(\frac{cy'}{x'-c}\right)^2=a^2,$$

that is, into the hyperbola

$$\frac{(x'-c)^2}{c^4/a^2} - \frac{y'^2}{c^2} = 1,$$
(4)

which has the midpoint of OV as its centre, the semi-latus rectum and the conjugate axis to a and c respectively, and the x-axis for the transverse axis. Thus we get

Theorem 12. Circles having a common centre can be transformed into concentric hyperbolas whose conjugate axes coincide and are equal in length, and whose latera recta are equal to the radii of the corresponding circles [We have only to chose O, V

such that the common centre is the midpoint of OV].

The converse is also true.

Since O, V are fixed points for all hyperbolas of the system (4) being the points where the circle, concentric with the hyperbolas and having its radius equal to the common semi conjugate axis meet the transverse axis, it is clear that we can obtain from theorem 12, theorems analogous to theorems 8, 9 and 10. The actual statement of the theorems is left to the reader.

It may be remarked here that circles having centre at V transform into conics having a focus at V and the corresponding directrix common, the semi-latera recta being equal to the radii of the corresponding circles.

4. The method of transformation given above can easily be extended to spaces of higher dimensions. For the transformation in n-diamensions we have simply to replace the line l by an (n-1)-flat. If 2c be the distance of the (n-1)-flat from the origin O it follows, exactly as in the case of two dimensions, that the relation connecting OP and OP' is

$$\frac{1}{r} + \frac{1}{r'} = \frac{\cos \theta}{c} \tag{5}$$

If we take OV as the x-axis we get the following transformation scheme in cartesian coordinates:

$$x_1 = \frac{cx_1'}{x_1'-c},$$

$$x'_1 = \frac{cx_1}{x_1-c}$$
(i = 1, 2,....n) (6)

The content \triangle of an (n+1)—simplex formed by the points

$$P_r\left(x_{r_1}, x_{r_2}, \dots, x_{rn}\right) (r = 1, 2, \dots, n + 1) \text{ baing}$$

$$\frac{1}{n!} \times \begin{bmatrix} x_{11} & x_{12} & \dots & x_{1n} & 1 \\ x_{s_1} & x_{s_2} & \dots & x_{sn} & 1 \\ \vdots & \vdots & \ddots & \vdots \\ x_{n+1}, x_{n+1}, x_{n+1}, x_{n+1}, x_{1n} & 1 \end{bmatrix},$$

we have, if \triangle' denotes the content of the transformed simplex, analogous to theorem 6, the

Theorem 13.

$$\frac{\Delta}{OP_1 \cdot OP_2 \dots OP_{n+1}} + \frac{\Delta'}{OP_1' \cdot OP_2' \dots OP'_{n+1}} = 0.$$

We can also write down without difficulty the analogues of the other theorems.

VYAVAHARIKA—PRAMANYA—A CRITIQUE

By

B. N. Krishnamurti Sarma, M.A.

To be true to Monism in philosophy one must naturally deny the reality of human experience altogether. To do so bluntly, would however be shocking to the susceptibilities of man. The Buddhist and the Advaitin have therefore tried to disguise the bitterness of their pill by the sugarcoat of च्यावहारिकप्रामाण्य (provisional validity) which they assign to human experience. Madhva feels that ज्यावहारिकप्रामाण्य is merely a euphemism for "invalid." It may be a mouthful phrase; but it cannot satisfy the philosopher's hunger for truth. It is at best a self-complacent lie with which one cannot hope to deceive all men for all time.

What is this " व्यावहारिकप्रमाण्य " of reality, in point of fact? Is it a 'working kind' of reality? That can only be when the said reality is assured of unstultifiability.¹ The " व्यावहारिक real" is admittedly not so. It is futile to argue that our ordinary experiences may be credited with just as much "provisional" validity as a dream experience! For one thing there is no proof that our dreams are so utterly unreal as the argument assumes.² They are indubitably the result of वासना s—the subconscious impressions

- 1. ड्याबहारिकता चास्य स्यादबाध्यत्वएव हि। (Anuvyākhyāna) I.4,89.
- 2. * * नच स्वप्नोऽपि नो मृषा

of the waking state. It is otherwise difficult to see the necessity for a "material cause" (বালনা s) and an "efficient cause" in their case. Non-entities like the Sky-flower are never in need of such causes.

Even the dreams and illusions are not wholly unreal. There is an element of reality in them:—

भ्रमेऽप्यभ्रमभागोऽस्ति तेन्मात्रमुपजीव्य हि । बाधकज्ञानवृत्तिः स्यात् * *

No one cares to deny even at a later date that he had gone thro' such and such an experience.⁴ To that content then, the dream or the illusion must be said to be real. The element of unreality comes in only at the point of its identification for the nonce with waking experience.⁵ This aspect of it alone is corrected and set aside by the **Theorem** and — not the entire experience as such. Thus, it is not so much the actual presence of the snake there as the psychological effect of its misapprehension there,—which is a fact—that is the real cause of the fright⁶ and the flight of the perceiver.

- 3. जागरितप्रभववासनानिर्मितत्वा स्वप्नम्य— Samkara, B. S. B. III,2,6
- 4. यद्यपि स्वप्तदर्शनावस्थस्य सर्पदेशनादिकार्यमनृतं तथापि तद्वन् गतिः सत्यमेव पूळं । प्रतिबुद्धस्याप्यबाध्यमानत्थात् ॥ निह् स्वप्नादुत्थितः स्वप्रदष्टं मिथ्येति मन्यमानः <u>तद्वगतिमपि</u> मिथ्येति मन्यते कश्चित् । (Samkara B.S.B. 2,1,14)
 - 5. जाग्रस्वमिति हि भ्रमः। (AV. I,4,90).
 - 6. सर्पभ्रमादायि हि इन्नमस्त्येय ताइशम् । तद्यार्थक्रियाकारि तत्सदेवार्थकारकम् ॥ (AV. I,4,91). 78

The example of dreams and illusions would moreover be powerless to prove the "provisional validity" of nonexistent things. It is beyond the capacity of the unreal to serve as a practical means of response-satisfaction7 such as is partially at least found to be the case in dreams and illusions. At any rate, there is difference of opinion anent such fitness8-whereas both parties to the controversy are agreed on the fitness of the real to operate as such a means of response-satisfaction.9 Why not then admit the reality of the world in so far as it admittedly ' 'अर्थिकियाकारि' especially when the 'real' has been admitted to be अशंक्रियाकारि ? The advantage of the argument is certainly on the side of Madhva in so far the अर्थिकियाकारित्व of what is "मिश्या" (unreal) is yet in doubt and to be established.

II.

It is difficult to condemn world perception as 'innately deceptive.' The statement that everything is deceptive and unreliable cannot be made without some reservation at least in favour of the very reasoning and grounds on which such a thesis is sought to be based.¹⁰ If this reasoning itself and those grounds themselves are deceptive the contrary proposition would be true that everything is sure and certain.¹¹ The kind of "negative elench" of the Khandanakara would

- 7. बाध्य नार्थिक्रियाकारि।
- 8. साधकत्वमसत्त्यस्य साध्यं विप्रतिपत्तितः (AV. II, 2, 228).
- 9. साधकत्वं तु सत्यस्य साक्षिणो ह्यावयोर्द्रयोः। सम्यक् सम्प्रतिपन्नं * * * AV. II,1,94.
- 10. मिथ्यात्वं यिदिदुःखादेस्तद्वाक्यस्याग्रतो भवेन् । AV I,1,17
- 11. भ्रान्तत्वं भ्रान्तताचत्स्यात्कथं नाभ्रान्तिसत्यता ? AV. III.2,98.

defeat its own purpose and would at once put such irresponsible debator out of court in any intellectual parley.¹² Such ultra scepticism would recoil upon the Advaitin himself and besmirch his own certitude of his Sakshi (self). Such a doubting Thomas can have no justification to open his mouth and make any statement whatever. He must bid good-bye to all attempts at arriving at the truth of the Vedanta through study and investigation: वेदान्त वाक्यानि हि स्वाविकारणाध्यवसानिविद्वता हि अक्षावर्गातः Samkara on B.S.B. 1.1.2. He would forfeit his place among inquirers after truth (परीक्षकs) and would be treated as outside the pale of debate (कथाबाह्य).

III.

If the validity of perception is called into question that of the monistic Scriptures could no more be exempt as both of them operate equally mediately and ultimately rest upon the same Sakshi for their interpretation and understanding. It is futile to put in that tho ultimate validity is denied to experience, it is conceded some sort of 'practical' or 'provisional validity.' What precisely is this "provisional validity? Is it 'being valid for sometime' and turning out 'to

^{12.} यदि नाङ्गीकृतं किंचिदनङ्गीकृततापि हि । नाङ्गीकृतेति मूकः स्यादिति नास्मद्विवादिता ॥

^{18.} प्रामाण्यमागमस्यापि प्रत्यक्षाद्वन्यतः कुतः ? साक्षिप्रत्यक्षतोत्वेषं मानानां मानतेयते ॥ AV. III,2,55.

be invalid' at another? 14 In that case, the Advaitic texts would share the same fate as worldly experience and the "dualistic texts (भेदश्रात्रs), For, it must be admitted in fairness that the two groups of texts (as conceived by the Advaitin) are mutually exclusive and each is in a state of suspended animation and hence invalid in the life time of the other.

Madhva also refutes the hairsplitting distinction in validity (drawn by the monist) between the Advaitic texts and the consolidated experience of duality and calls the Sakshi to witness. There can be no 'degrees of validity.' The very idea is the result of a confusion of thought. Factual validity can admit of no temporal limits. The true is true for all times and the untrue must remain so now and within a given spatio-temporal setting for ever. The so-called व्यावद्याप्त validity of experience is thus a misnomer. The world of experience that (according to the Advaitin) is sure to be nullified (invalidated) with reference to all the three periods of time. नासावस्ति अविष्यतीय विकासिक

कालान्तरेऽप्यमानं चेदिदानीं मानता कुतः?

The Advaitin then must not be afraid to strike if willing to wound universal experience. He must therefore make bold to throw off his mask and coolly declare that world experience is really invalid as it is falsified by the true perception of the oneness of self. He should not play a double game of running with the hare and hunting with the hounds. He would have to state also if the Advaitic proof that establishes the oneness of the Atman by negating all

14. कंचित्कालं प्रमाणीभूय पश्चादप्रमाणी भावः ॥ (Sannyayaratnavali, III,2, p. 6b)

duality in release, continues to be valid and true for ever afterwards or not. In the former case, there would no longer be a pure monism. If the said proof (प्रमाण) of oneness is likely to be stultified in its turn, there would be a recrudescence of world experience¹⁵ then. Nay, from one point of view, an absolute validity for the Advaitic texts would be as much detrimental to the interests of a pure Monism as that of duality-texts. The Monist would thus find himself between the horns of a dilemma. He can neither reject the validity of his own monistic texts nor yet hold it to his heart.

Madhva argues that whatever else may or may not be admitted in release, Time as a fundamental category must be recognised to persist and endure. Any attempt to negative Time in release would still presuppose "Time." The persistence of time in release is also borne out by temporal adjuncts like तदा (then) अथ (thereafter) in passages like:—

तीर्णोहि नदा सर्वान् शोकान् हृदयस्य भवति । अथ मत्योऽमृतो भवति ।

descriptive of the state of release.

We are thus forced to ascribe the utmost validity to whatever is attested by our own intimate personal experience of outside reality. Such penetrating experiences (of an intimate or immediate character) are never seen to be falsified by reason or revelation:—

क च प्रत्यक्षतः प्राप्त16 मनुमागमबाधितम् ? AV. III, 2, 64.

- 15. मिथ्यात्वमानं मोक्षेपि मान किं नेति भण्यताम् । मानत्वे ऽद्वैतहानिः स्यादमानत्वे ऽप्यमोक्षता ॥ AV. III,2,61.
- 16. रहरं तु यहरं AV. II,2,231.

IV.

In this connection, Madhva criticises the plea of the Advaitin that the illusory identification of body and self experienced by us, is set aside by reason and revelation. He argues that far from our being under the grip of any such universal and ineradicable delusion, we are all of us generally conscious of the essential distinction between the two as is attested by the familiar judgment—"This is my body." Nor is such discrimination confined to human beings alone. It extends to the subhuman species as wellto the beasts, birds and even aquatic creatures whose lives are from the moment of their birth regulated by suitable responses to the instinctive emotions of love, aversion, fear and want. This shows that these creatures have a vivid recollection of their past lives and experience and instinctively model their present behaviour upon their past¹⁷. So then, judgments like 'I am fair' 'I am dark' are to be treated not as erroneous perceptual identifications but as figurative usages on a par with others like—'the cots are screaming." (मञ्चाः क्रोशन्ति :).18 The millionaire that has become bankrupt is said to be "lost". True, if there is such a widespread realisation of the distinction of body and soul as between a house and the tenant therein, one should expect to find people say: "My body is white; not I." Madhva explains that the reason why we do not usually find them saying so is not because they do not realise the body and

- 17. जातामात्रा मृगा गावो हस्तिनः पक्षिणो झषाः।
 भयाभयस्वभोगादौ कारणानि भिजानते ॥
 अस्मृतौ पूर्वदेहस्य विश्वानं तत्कयं भवेत्।
 यदा देहान्तरश्चानं देहैक्यावसितिः कृतः॥ AV. III,2,68-9.
 - 18. उपचारश्च कृष्णोहमिति कर्वमलेपने॥

soul to be different; but because their realisation is not vivid eno' for the nonce, to rise above the counter-acting force of the all-pervasiveness of the self within the body. The body is shot thro' and thro' with the self that pervades it inside and out even as fire permeates a flaming ball of iron or a heap of coals. So much so that in our sheer inability to keep the two apart we are led to use such figurative descriptions as "coal burns" "the iron-ball is ablaze." There is nothing strange in this. Even so should it be in the case of the body and the self when we say-'I am fair' 'I am dark', 'I am lost'; 'I have won' etc. There is no risk of their being misunderstood as such usages have come to Moreover, awareness of mutual distinction stav (रूढ.) may at times go together with an inability to find suitable linguistic expression to mark off one thing from another. We may be aware of the differentia without being able to explain it to the satisfaction of another.20 Instances are not wanting of mothers of twins who though capable of distinguishing them, would yet be unable to explain the how of it to another's satisfaction. Hence the anxiety of Scripture to drive home the destinction and bring it to the forefront.

Thus, the pet theory of the Advaitin that perceptual judgments are inherently liable to be sublated by reason or revelation stands discredited partly because (1) as between the body and soul there is no case at all for such identity; (2) or because where the confusion is fostered in

- 19. व्याप्तत्वावात्मनो देहे व्यवहारेष्वणटवात्। मेदज्ञाने ऽपि चाङ्गारविद्ववत्स्वाविविक्तवत्॥ भवन्ति व्यवहाराश्च॥ AV. III2,70-71.
- 20. * * * ^{*} नहि प्रत्यक्षगानिप । अर्थान्यथानुभवतः प्रतिपाद्यितुं क्षमाः ॥ (^{Ibid}).

hedonistic circles it is not in the nature of a sense-perception at all (but of blind belief in a false doctrine); (3) or because the perceptual the judgment turns out to be valid as in कृष्णां उहम्; or (4) because where it is invalid as in giantsa (illusion of silver in nacre), it is rectified not by reasoning but by a valid and subsequent perception (बलवाबर्य) itself! There is thus no case of a perceptual knowledge being set aside solely by inference or Scripture without reference to an irrefragable subsequent perception²¹ or the test of conviction of साक्षी. The attempt at discrediting experience on extraneous grounds is thus doomed to failure. That being so, the self-validity of experience stands unshaken and the dodge of व्यावहारिकमामाण्य is completely exposed.

21. **ए**एस्य वस्तुनः बलवहृष्टिं विना नान्यत् बाधकम्॥—(Tattvodyota)

A FEW CHAPTERS IN ALKALOID CHEMISTRY

By

DR. K. N. MENON, M.Sc., Ph.D., (LOND.), A.I.C., A.I.I.Sc., Professor of Chemistry, Maharaja's College, Ernakulam.

The chemistry of the alkaloids is one of the most fascinating problems offered to students of organic chemistry. It is very difficult to make a choice of material for an article of this type and considerations of space impose restriction of method of treatment. However, a few topics have been selected for presentation in an easily readable form.

CINCHONA ALKALOIDS.

The chief interest in this group of alkaloids is due to its application in malaria. Cinchona bark contains eight principal alkaloids of which quinine, dihydroquinine, quinidine, cinchonidine and cinchonine are most commonly used in medicine. Amongst these five, quinine occupies the foremost place of importance. It is very difficult even now, to correctly evaluate clinical results and in the case of cinchona alkaloids excepting quinine, it is extremely difficult to get others in sufficient quantity of absolute purity.

In spite of the fact that more than a century has passed since the discovery of cinchona as an antimalarial and despite numerous attempts to solve the problem of chemical constitution and antimalarial action, it cannot be said that the problem is solved. The difficulties associated with the problem are numerous, not the least difficult of

which is in instituting strictly comparative clinical tests, in view of the non-transmittibility of human malaria to experimental animals.

In 1912 Kaufmann¹ advanced the view that the use of quinine as an antimalarial agent is due to its substituted hydroxy quinoline ethylamine structure.

(R,R' and R" are hydrogen or alkyl groups)

The development of this thesis was held up until the discovery by Giemsa, Weise and Tropp² that "Pasmodium prœcox", parasite of bird malaria, can be used as an experimental infection. The effect of various drugs on this parasite is parallel to their action on that human malaria. A quantitative comparison between various drugs can be made by comparing the time required for the appearance of the parasites in experimentally infected canaries. This method, like the use of trypnose in some branches of chemotherapy, proved very useful.

Experiments with cinchona alkaloids have shown that for the same type of bird malaria, the lævorotatory alkaloid is more effective than its optical isomer. The alkaloids have furnished illustrations of striking changes in action with slight structural variations and conversely of profound structural alteration not affecting action to any

^{1.} Ber., 1912, 45, 3090; 1913, 46, 63.

^{2.} Arch. Schiffs. U. Tropenhygiene, 1926, 30, 334.

marked degree. It is observed that antimalarial activity of cinchona alkaloids do not disappear unless (1) changes, such as the preparation of various ethers, are carried out to such an extent as to bring about an abnormal increase in molecular weight; (2) alteration in the basic character of the substance, e.g., by oxidation of the vinyl side-chain to carboxyl; (3) change in the structural type, e.g., conversion to quinicines by opening out the quinuclidine portion of the molecule.

There was considerable doubt about the exact nature of the products obtained by demethylating quinine. Henry and Solomon³ find that demethylation with aluminium gives apoquinine, C₁₉H₂₂O₂N₂, mixed with chlorodihydro-apoquinine, C₁₉H₂₂O₂N₂Cl. The products of demethylating quinine with sulphuric acid⁴ include apoquinine, isoapoquinine, and hydroxydihydroapoquinine. Demethylation of quinidine was studied by Suszko and collaborators⁵ who have isolated apoquinidine in addition to isoapoquinidine. Quinine-apoquinine change involves the shifting of the double bond besides demethylation.

(I)
$$CH_3O-C_9H_5N-CH(OH)-C_7H_{11}N-CH:CH_2\longrightarrow$$

 $\longrightarrow HO-C_9H_5N-CH(OH)-C_7H_{10}N:CH-CH_8$ (II)

Goodson⁶ has studied the addition of hydrogen halides to the vinyl group and the value of the products formed in

- 3. J. Chem. Soc., 1934, 1923.
- 4. *Ibid*, 1935, 966. See also Butler and Cretcher J. Amer. Chem. Soc., 1935, 57, 1083.
 - 5. Rec. Trav. Chim., 1933, 52, 839; Rocz. Chem., 1935, 15, 209.
 - 6. J. Chem. Soc., 1935, 1094.

the treatment of malaria. Ainley and King⁷ have accomplished the very difficult synthesis of the substance (III) which manifested some antimalarial power.

This synthesis constitutes the first example of an active substance modelled on the cinchona type which is not known to occur in nature.

A large number of observations have recently been made available by the publication⁸ of the results of a large number of experiments carried out under the schemes organised by the Health Organisation of the League of Nations. A short summary of this report would not be out of place in this connection.

Antimalarial drugs are probably of two kinds, schizonticidal and gametocidal. Schizonticidal drugs include the naturally occurring cinchona alkaloids and atebrin; probably the only representative of gametocidal drug worth mentioning is plasmoquin. The main defects of the synthetic drugs, particularly plasmoquin, is their toxicity while the principal advantage of atebrin over quinine is its more powerful action. The best clinical results seem to be obtained by the combined use of schizonticidal and gametocidal drugs, quinine-plasmoquin being considered to be the best.

- 7. Proc. Royal Soc, 1938, B 125, 60.
- 8. League of Nations 4th General Report of the Malaria Commission.

ERGOT ALKALOIDS.

The oxytocic properties of ergot has placed it in a very important position and has long been used in obstetrics. Many attempts have been made to identify the principle responsible for the physiological action of ergot—to hasten labour or prevent haemorrhage in querperium. These attempts resulted in the isolation of a number of alkaloids. The alkaloids form five pairs, the members of each pair being interconvertible. Each pair consists of a lævorotatory physiologically potent member constituting the ergotoxine series and its opposite number, a strongly dextro-rotatory, physiologically weak compound.

Our knowledge of these alkaloids has progressed in rapid strides within the last few years. Barger and Carr, Barger and Dale, 10 and Kraft 11 showed ergotoxine, C35H36O5N5; is convertible into ergotinine by treatment with acetic anhydride or by boiling with methyl alcohol. The reverse change is brought about by hot, dilute, alcoholic phosphoric acid solution. Ergotamine and ergotaminine, C35H35O5N5, were isolated by Stoll, 12 the conditions under which this pair undergoes isomeric interconversion being governed by conditions similar to those governing the ergotoxine—ergotinine conversions. The ergosine—ergosinine

- 9. J. Chem. Soc., 1907, 91, 337.
- 10. Biochem. J., 1907, 2, 240.
- 11. Arch. Pharm., 1906, 244, 336.
- 12. Schweiz, Apoth, Ztg., 1922, 60, 341. See also Smith and Timis, J. Chem., Soc., 1930, 1390; Soltys, Ber., 1932; 65; 553; Barger, Analyst, 1937, 62, 340.

pair, C₅₀H₅₇O₅N₅, was isolated by Smith and Timmis.¹³ Ergocristine and ergocristinine, C₃₅H₅₉O₅N₅, were obtained from Spanish and Portuguese ergot by Stoll and Burckhardt.¹⁴

The therapeutic values of ergot were ascribed to the above four pairs of alkaloids. Moir¹⁵ developed a new technique for comparing the action of aqueous extracts of ergot with those of the four pairs of alkaloids. He found that both qualitatively and quantitatively the results obtained on human guerperal uterus were different. It was found that the response to the extracts followed much more rapidly on their oral administration than did that of the alkaloids, the effect of which were, in fact, somewhat erratic when administered in this way. The author concluded that this must be due to some unknown principle and this inference was confirmed by the isolation of the active principle involved by Dudley and Moir.¹⁶ This new alkaloid, called ergometrine, possesses all the qualities of the liquid extracts of ergot. Dudley17 has devised a simple method of isolation which makes ergometrine probably the most easily obtainable of the ergot alkaloids.

Pure ergometrine, C₁₉H₂₃O₂N₃, is a monoacid base.¹⁸ The manufacture of ergometrine has resulted¹⁹ in the isolation of another alkaloid ergometrinine, isomeric with ergo-

^{13.} J. Chem. Soc., 1937, 396. See also Kofler, Arch. Pharm., 1938, 276, 41.

^{14.} Zeit. Physicl. Chem., 1937, 250, 1; 1938, 251; 287.

^{15.} Brit. Med. J., 1932, i, 1022, 1119.

^{16.} Ibid., 1935, i, 520.

^{17.} Pharm. J., 1935, 134, 709.

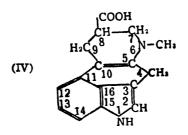
^{18.} Proc. Roy. Soc., 1935, 118B, 478.

^{19.} Nature, 1935, 136, 259.

metrine, into which it is convertible. Stoll and Burckhardt¹⁴ have found a new ergot pair, isomeric with ergotoxine and ergotinine, the lævo form, ergocristine, is highly active, the dextro form, ergocristinine, is less active.

The chemistry of the ergot alkaloids is progressing so very energetically and that in the not distant future their constitutions would all be indisputably established. Sufficient data is now available to visualise the chemical relationship which exists between the members of this group: ergotoxine, ergotinine; ergotamine, ergotaminine; ergometrine, ergometrinine; all yield lysergic acid on alkaline hydrolysis. This acid thus appears to be the common basis for ergot alkaloids.

Lysergic acid, first obtained by Jacobs and Craig.²⁰ was reducible to α-and γ-dihydrolysergic acid,²¹ and on boiling in aqueous solution is converted into isolysergic acid.²² d-Lysergic acid is converted into dl-lysergic acid by heating in dilute barium hydroxide solution at 150° in an atmosphere of nitrogen. Jacobs and Craig²³⁻²⁵ suggest formula (IV) for lysergic acid.



- 20. J. Biol. Chem., 1934, 104, 547.
- 21. Ibid., 1934, 106, 393.
- 22. Smith and Timis, J. Chem.. Soc., 1936, 1440.
- 23. J. Biol. Chem., 1936, 115, 227.
- 24. Ibid., 1932, 97, 739.
- 25. J. Amer. Chem. Soc., 1938, 60, 1701.

When ergotinine²⁴ or lysergic acid²¹ is submitted to nitric acid oxidation, a tribasic acid, C₁₄H₀O₈N, is obtained and this yields quinoline on distillation with soda lime. 1-Amino-5-methyl-naphthalene is formed by potash fusion of dihydrolysergic acid. Jacobs and Craig²⁵ observe that dihydrolysergic acid loses water on pyrolysis to yield a neutral unsaturated product to which two alternative formulae can be assigned (Va and Vb)

In the earlier formulation²³ of lysergic acid, it was assigned an α-amino acid constitution, but in view of the production of the neutral product and the dissociation constant of the acid, the β-amino structure²⁵ is preferred. A compound called ergoline containing the skeleton of dihydrolysergic acid has been synthesised by Jacobs and Gould,²⁶ and is represented as the carboxyl and methyl replaced by hydrogen. The position of the carboxyl group on the 8th carbon atom is also supported by the basic dissociation constants of dihydrolysergic acid and 6-methyl ergoline. The work of Stoll and Hofmann²⁷ on the recmization and isomerisation of lysergic acid shows clearly that the acid contains only one asymmetric carbon atom as postulated in (IV).

A very interesting and important achievement in ergot chemistry is Stoll and Hofmann's²⁸ partial synthesis

^{26.} J. Riol. Chem., 1937, 120, 141; 1938, 125, 289.

^{27.} Z. Physiol. Chem., 1937, 250, 7.

^{28.} Ibid., 1938, 251, 155.

of ergometrine and ergometrinine by condensing d-2-aminopropanol-1 with racemic isolysergic acid azide, obtained by the action of hydrazine hydrate on lysergic acid. This synthesis confirms the deductions²⁹ derived from the analytical side.

MONOCROTALINE.

'Crotalaria spectabilis', like many species of crotalaria, is toxic and its toxicity has been shown to be due to an alkaloid monocrotaline,³⁰ C₁₆H₂₈O₆N. Hydrolysis of monocrotaline yielded³¹ a basic product, retronecine, and an acid, C₇H₁₂O₃, monocrotic acid.

$$C_{16}H_{23}O_6N+H_2O\longrightarrow C_8H_{13}O_2N$$
 $+C_7H_{12}O_3+CO_2$

The molecular formula of monocrotaline and its hydrolysis to an acid and an alkanolamine places it in the same group ss Senico, Heliotropium, and Trichodesma alkaloids. Another mode of cleavage successful³² in this group is hydrogenolysis. Monocrotaline is readily reduced to retronecol, C₈H₁₅ON, and monocrotalic acid, C₈H₁₂O₅.

Monocrotalic acid is monobasic, optically active, and on heating with alkali is decomposed yielding the monobasic monocrotic acid. Adams and Rogers³¹ and Adams, Rogers and Sprules³³ have shown that monocrotic acid forms a monomethyl ester which forms a dinitropheny-hydrazone. The action of iodine and alkali on the acid

^{29.} Science, 1935, 82, 16; J. Chem. Soc., 1937, 396.

^{30.} Ber., 1890, 23, 3557; J. Amer. Chem. Soc., 1935; 57; 2560.

^{31.} J. Amer. Chem. Soc., 1939; 61, 2815.

^{32.} Ber., 1935, 68, 1051; J. Chem. Soc., 1935; 11.

^{33.} J. Amer. Chem. Soc., 1939, 61, 2819.

gave iodoform, thus indicating a keto-methyl group. Oxidation with sodium hypobromite gave a mixture of meso-and racemic-a: a'-dimethyl succinic acid.

The presence of a lactone group in monocrotalic acid (VI) is indicated by back-titration of the acid with excess of alkali. The acid decomposes on heating³⁴ yielding $\alpha:\beta:\gamma$ -trimethylangelical actone (VIII) which is also obtained by the dehydration of monocrotic acid (IX).

$$(C_{7}H_{11}O_{8})-COOH \longrightarrow (C_{7}H_{11}O_{8})-COOCH_{3}$$

$$(VII) \qquad (VII) \qquad -H_{2}O$$

$$C_{8}H_{10} < \bigcap_{CO} \qquad \leftarrow CH_{3}-OH \qquad (X) \qquad H_{2}$$

$$(C_{8}H_{11}O)-COOH \qquad (C_{7}H_{11}O_{2})-COOCH_{3}$$

$$(XI) \qquad (XII)$$

$$(C_{7}H_{11}O_{2})-COOH \qquad (XII)$$

The same lactone can be obtained by a two step procedure which clarifies the reaction. Methyl monocrotalate (VII) on heating in vacuo loses water to give an unsaturated ester (X) together with a small amount of the lactone

(VIII). This ester can be hydrogenated under high pressure to a dihydro ester (XI) which in turn may be hydrolysed to a crystalline lactonic acid (XII). The unsaturated ester (X), on hydrolysis with concentrated hydrochloric acid, yields the lactone (VIII).

Three structures for monocrotalic acid have been considered ³⁴ (XIII), (XIIIa) and (XIIIb).

Monocrotalic acid in presence of alkali is decarboxy-lated to monocrotic acid (XIV—dimethyl levulinic acid. Adams and Lang³⁵ have established structure (XIV) by synthesis. Although the synthesis of monocrotic acid has confined the structure of monocrotalic acid to the three alternatives, it is only a synthesis that will finally decide the question.

Retronecine, C₈H₁₈O₂N contains two hydroxyl groups and one double bond; retronecanol, C₈H₁₅ON, is saturated and has one hydroxyl group. These two bases are identical with those obtained by Manske³⁶ from retrorsine. The

^{35.} Ibid., 1940, 62, 2289.

^{36.} Can. J. Research, 1930, 5, 651. See also Refs: -32.

bases are isomeric with analogous bases from the alkaloid heliotrine described by Menshikov.³⁷ Adams and Rogers³⁸ have critically reviewed the work of Menshikov from which he deduced that heliotridane was 1-methyl pyrrolizidine (XV).

By degradation (XV) can yield 1-methyl-2-s-butyl pyrrolidine (XVI) or 1:3-dimethyl-2-n-propylpyrrolidine (XVII). Menshikov's results and deductions have been clarified by the synthesis³⁸ of 1:3-dimethyl-2-n-propylpyrrolidine and its identity with dl-dihydro-des-N-Methylheliotridane, a compound obtained by exhaustive methylation of heliotridane followed by reduction.

Retronecanol was converted into chlororetronecane by treatment with thionyl chloride. The chlorine was replaced smoothly by hydrogen, using Raney nickel and hydrogen at room temperature, yielding heliotridane. It has already been stated that retronecanol is formed in the hydrogenation of monocrotaline, two molecules of hydrogen being absorbed. The alkaloids heliotrine³⁷ and retrosine³² hydrogenate in a similar manner, hydrogenolysis occurring at the ester grouping. Diacetyl retronecine reduces to acetylretronecanol³²⁻³⁹ and acetic acid. It thus appears

^{37.} Ber., 1932, 65, 974; 1933, 66, 875; 1935; 68; 1051; 1555; 1936, 69, 1110, 1799 and 1802.

^{38.} J. Amer. Chem. Scc., 1941, 63, 228.

that retronecine and heliotridine contain a remarkably labile hydroxyl group which is lost by hydrogenation. Adams and Rogers³⁹ designate the stable hydroxyl group α -and the labile β . The same authors have studied the catalytic hydrogenation of monocrotaline and retronecine under various conditions and their results can be summarised as follows:—

- (a) The partial reduction of monocrotaline gives monocrotalic acid and a base desoxyretronecine, C₈H₁₈ON.
- (b) If retronecine is reduced under certain conditions using Raney nickel, only one molecule of hydrogen is absorbed with saturation of the double bond and formation of platynecine, the base obtained by saponification of the alkaloid platyphylline.⁴⁰ Platynecine forms a mono-and a di-benzoate depending on the conditions, one hydroxyl esterifying more readily than the other.

Accepting the basic nucleus of retronecine as 1-methyl pyrrolizidine, Adams and Rogers³⁹ have proposed the following formula (XVIII) for retronecine

39. Ibid., 537.

40. See Orekhov and Tiedebel, Ber., 1935, 68, 650; Orekhov et al, ibid., 1886; 1936, 69, 1908.

the corresponding saturated compound for platynecine, retronecol by formula (XIX), desoxyretronecine by (XX) and monocrotaline by (XXI).

TAMIL WORDS AND THEIR MEANINGS

By

RAO SAHEB M. R. RAJAGOPALA IYENGAR, M.A.

The growth of the vocabulary of a language is, in many respects, like the growth of the population of a country. Old words give birth to new ones which slightly differ from their parents and thus the stock goes through a process of multiplication. The new words formed from the old are used in senses which, though closely allied to the meaning of their originals denote different shades of thought and emotion. In course of time some words drop out of use like தப்பம் in Tamil for ghee and their places are taken up by younger ones either grown out of the original words or borrowed from cognate or other languages. Just as new surroundings or circumstances force the individuals in a nation to give up their old callings and adopt new ones in the struggle for existence, in languages also, as the centuries pass, certain words acquire new meanings more or less different from their old senses. Division of function is another point of resemblance between language and population. When several words in a language have the same sense, they develop, in the process of time, differences of meaning justifying their existence. This principle of division of function may be seen prominently at work when the language spoken by a people comes into contact with that of foreigners by the conditions brought about by trade, politics, religion or other social activities. Native words expressing certain ideas mingle with those of the foreign language denoting the same ideas. Sometimes the foreign word aggressively drives out the native from current use occupying its place in triumph, or, what is more common, the two sets of words enter into a tacit compact dividing the extent of meaning between them. This state of conflict and compact was at work when Tamil scholars imported a large number of Sanskrit words as a result of their admiration of the works of Sanskrit authors. Even when Tamil possessed words to express the same ideas, the importation became common and was thought, perhaps, to enrich the resources of Tamil expression.

The principles that underlie the development of new meanings in words and the changes often undergone by words in their meaning are found to be the same for all languages, to whatever family, Dravidian, Indo-Germanic, or Semitic, they might belong. These changes in meaning are due to mental associations, working through long periods of time. These mental associations follow the same laws of psychology among all races of men, because there is a sub-stratum of kinship, mental and spiritual, common to all mankind. The principles of semantics, or the science of meanings which linguistic scholars have deduced from their study of the vocabulary of Indo-Germanic languages are therefore found applicable also to Tamil though the latter belongs to a different family.

The changes of meaning undergone by Tamil words may not strike us as having occurred at all, if we compare their use in ancient Tamil literature with that in modern Tamil verse or even prose. Literary Tamil, especially in verse, often employs words in their earlier senses as seen in classical writers of old ignoring their present day meanings. A modern English poet may use 'fond' in its old sense of 'foolish'; from this it would be idle to assert

that the word has suffered no change of meaning. So also the Tamil word κπρρώ which applied to good as well as bad smell in olden times, has now come to be used in current talk for only bad smell. A verse writer of to-day might still use it for fragrance in his poem. This should not blind us to the fact of its having changed in meaning. Current use in ordinary conversation affords a surer test of such changes than literary usage. This test is, of course, available only in living languages like Tamil. Sanskrit and other languages which are no longer the mother-tongue of any people contain words stratified in the writings of different epochs and the study of the semantics of such languages becomes exceedingly difficult. Even in them, the classification of literary specimens according to their age of composition and the comparison of the use of words in the earlier works with that in later writings may reveal the occurrence of changes in the function of Bearing in mind these prefatory remarks, we may now proceed to study the operation of semantic principles in Tamil words.

In the earliest stage of the development of all languages the few words that have already come into existence are extended by metaphorical usage to denote varied objects, thoughts and feelings which are in some way associated with their original meaning. Take, for instance, the word so, one of the earliest words in the Tamil vocabulary. Its primary significance is, of course, the head. Then by metaphor, it is used to mean the chief person in a group or community since his position of importance is like that of the head to the members of the human body. The head being the first member of the body to strike the beholder, so is extended also to mean the first as in so is source' or 'origin' An easy transition from this is its use for 'source' or 'origin'

as in திலக்காவேரி The latest development in its use is to denote a postage stamp which bears the figure of the head the sovereign. From 520 is formed the derivative ത് one who is like the head in relation to his group. clan, or sect. ക്യമങ് extends its area of denotation in course of time to include all great men, the guru or the spritual teacher, and God. Since the chief character of a story, poem or play has the prominence of the head in the human body, தல்வன் is employed also in that sense. The same process of metaphorical extension is illustrated in the earliest Tamil word. So Its original meaning is, of course, the hand or arm. Metaphorically the rays of the moon or the sun may be called their hands and thus one comes to mean 'a ray.' Since the two sides in a quarrel or fight may be called the two hands on either side of the body, so denotes also side, faction, or party. A natural extension of some is to mean the elephant's trunk which serves the purpose of the human arm. one extends its range to mean also workmen as in பத்துக்கை வேல செய்தது cf. ('ten hands were at work in that channel' in English). Here the extension is not by metaphor but by synecdoche. One more illustration may suffice for this process of figurative extension of the use of a word. strive a native Tamil word of primitive origin. Its earliest sense is 'leg' or 'foot' of person or animal. Then metaphorically the word is applied to mean the lower part, base or bottom of a thing. As the wheels of a cart or carriage may figuratively be termed its legs, கால் comes to mean 'wheel.' கால் is similarly employed to denote post or pillar which is the leg on which a house or shed stands. such also means onefourth presumably from the relation of a single leg to the four legs of an animal. Similarly the word which borrowed from Sanskrit and originally meaning 'root' has the following meanings arrived at by metaphorical usage:—foot, base, origin, source, cause, means or agency, and text of a book. Hosts of other illustrations may be given in support of the remark that, Tamil like other languages consists largely of forgotten metaphors.

The same process of metaphorical extension may be seen at work in other foreign words borrowed into Tamil. For example, the Sanskrit word ux (paksa) uifti meaning, the wing of a bird, was imported into Tamil. The two wings of a bird may figuratively be extended to mean the two sides of a question, the two parties in a quarrel or battle, and the two alternatives in a dispute or discussion. So uifti came to mean side, party, and alternative. Since a man attached to a party showed affection to its members uifti came to mean love or affection. Finally in & Gungo uifti and the two alternative possibilities. The metaphor was, in course of time, forgotten after the enrichment to the vocabulary had taken place.

Extension

Apart from the process of metaphorical extension at work in the earliest stages of the development of a language, we may observe also other forms of extension in the meaning and application of a word. Drawhui, originally a Sanskrit word, meant at first gold; later it was applied to all forms of money gold or silver. Luria means primarily 'grandmother' but is extended to mean 'any old woman.' Light Luris Brio originally Sanskrit, meant the five vessels or cups used in the worship of the gods to contain Arghya, Padya Acamaniya, Snana (bath), and Suddhadaka (pure

water). The word has now come to mean among Brahmins any drinking cup or tumbler. எண்ணெய் and தண்ணீர் are interesting examples of extension. In his article entitled "The Semantic Principle of Expansion," published in The Journal of the Annamalai University, Vol. VI No. 2, Mr. A. C. Chettiar points out that எண்ணெய் originally meant எள் + கெய் 'gingelly oil' but, in course of time was extended to mean 'any kind of oil' and that simmer, originally தண் + கீர் 'cold water' has been extended to water in general, cold or hot, as in சுடு தணணிர். The two words afford instances of extension in usage due to ignorance of etymology. The Tamil word Orio was formerly wide in its denotation and was applied to any sticky or oily substance: 'blood,' 'fat,' 'grease,' civet, (புழுகு கெய்) oil and butter (வெள் + கெய) வெண்ணெய், were all கெய்; the ancient word for clarified butter or ghee, the modern கெய் ெகய் was அப்பம் as in Canarese. As time passed on, suffered a restriction in its use and meaning and came to mean only 'ghee' siili having gone out of use. The need for another word meaning 'oil' in general led to the adoption of எணணெய் whose derivation எள் + கெய் had by that time been forgotten. Thus எண்ணெய் has become extended in its scope and means oil in general. For gingelly oil a new word was invented நல்லெண்ணெய்(நல் or நல்ல + எண்ணெய்)தேங்காய் எண்ணெய்,கடலெண்ணெய், ஆமணக்கெண்ணெய் and the like are thus etymological absurdities due to ignorance.* A similar ignorance has led to the extension of the

*There are, however, some philologists who hold that என் ணெய் is not என்+ெய் as given in the Tamil Lexicon. They are of opinion that எண்ணெய் is a derivative of the Prakrit word inēa (Sans.) meaning oil. If so, எண்ணெய் would not be a case of extension at all. meaning of தண்+மீர் or தண்ணீர். The original Tamil word for water was மீர் as in Canarese. For cold water the compound word தண்ணீர் was formed as in Canarese tanniru and for hot water the compound formation was வெருமீர் or சடுமீர் corresponding to Canarese bisi-niru. Owing to ignorance of the meaning of the adjective தண் (cold), தண்ணீர் was afterwards understood to mean water in general with the result that we have such absurdities as பச்சைத்தன்ணீர் and சடுதண்ணீர். That the extension was the result of later ignorance of etymology will be evident when it is pointed out that some sects of Brahmins use

The employment of a word which was originally the name of a person noted for some quality or trait in history or legend to all persons exhibiting that characteristic is another form of extension. The proper noun has in course of time, become a common noun and is used as such even by people who have no knowledge of the original. 2900 மஞ்சன் who is referred to in the Ramayana as a prince who took a delight in throwing children into the river has now come to mean any mischievous or ill-behaved per-முதேவி literally the elder goddess, the elder sister son. of Lakshmi, the goddess of good fortune and prosperity is now used to mean any person who brings ill-luck. கும்ப கர்ணன், the great sleeper in the Ramayana is now used of any person who sleeps too much. sas it the name of the great sage, has now become a common noun meaning a mischief-maker. சகுனி or சகுனி மாமா, Duryodhana's uncle, is now a by-word meaning 'evil genius.' அரிச்சர் தொன், மன்மதன், சுக்கொசாரி, யமன்,பிருகஸ்பதி and அனுமார் are other examples as also # and macan.

Like the names of persons, the names of some animals are often used of persons believed to possess similar qualities. 40 and செங்கம் for a valiant man குயில், for a singer with a good voice. Soft for a beautiful woman, மக்கு and கழுதை for fools and பெருச்சாளி for a cunning old fellow may be cited as examples of this form of extension. பரப்பரம்பு is not amenable to control by spells and charms like கல்லபாம்பு or cobra and is hence used to mean one who will not be bound by any principle of right conduct. From the screech-owl, whose screech at night is believed to portend death is employed to mean one whose presence is ominous. The huge size of the elephant has led to யான being used in many compound formations to mean big. As examples may be stated யாளேக் குந்துமணி, யானே கெரிஞ்சு and யாணக்கால (elephantiasis of the leg). The word is often employed in the sense of dunce. It is evidently a contraction of the Sanskrit word manduka which means frog, a creature believed to be silly. A few place-names, too have gone through this process of extension. கயாவாளி or கயவாளி means, in Tamil, a cheat or scoundrel and is from Gaya-wallah, a native Brahman of Gaya who cheats pilgrims under false pretences for the sake of money. இருப்பர்தாருத்தி உப #ππίο has come to denote hypocritical or insincere invitation or offer of hospitality. The word is from இருப்பக் தருத்தி, a village near Trivadi in the Tanjore District. where the idol from the temple of Trivadi is invited in a half-hearted and insincere manner to hospitality at night. கும்பகோணம் is in slang, an expression meaning deceitful conduct. மைசூர் சஸம், and மைசூர்ப்பாகு are other examples of extension in place-names. Very

think of Mysore when they use these words for the respective articles of food. About the examples cited above of the names of persons, animals and places being extended to mean those who exhibit similar qualities, it has to be said that some persons who use them in the new sense may be aware of the metaphorical or figurative origin of the extension. But even they sometimes forget the figurative extension when they use the words, although, if asked, they might be able to explain the allusion to literature, legend or tradition contained in them. As a matter of fact, extension of meaning may be said to pass through three stages. In the first stage the extension is metaphorical and deliberate. In the second stage the word is used to mean something similar to the object indicated originally by the word, though the person employing it forgets, for the time being, that he is employing a figure of speech. This is the stage when the metaphor may be said to begin fading. In the third stage, the figurative character of the extension is generally completely forgotten, and the word may be said to have an existence independent of its origin. It is in this way that metaphors have faded in the meanings of many words.

Restriction or specialisation of meaning.

Far more common in Tamil than the principle of extension is the opposite process of restricting the use of a word to only a part of its original denotation. Actoriginally signified any room within another room. At present it refers only to a kitchen. Firewal (Firewal), originally meaning a small garment, means now the small garment of a girl. It is no longer applied to a boy's garment. The means leaf, of course, but, sometimes, it is restricted to Cappalla (betel). Carrinfluoria is means, literally setting (a thing) on fire and must have been used in that

wider sense in the past. Now it is employed to mean lighting a funeral pyre. #172000 is any piece of cloth or straw rolled up. Now it means only a mop. som was formerly any lord, master, or chief, but now it is generally restricted to mean Europeans. สถ่องอาก was formerly any room built of stone but is now only a sepulchre. பிள்ளேயார் is, etymologically, the respected son of revered parents but is commonly applied only to Ganesa, the son of Siva. பொடி means, of course, any powder even now, but has also the restricted sense of tobacco powder or snuff. வாயிதாப்பணம் should apply to any money paid in instalments but in some Tamil Districts is restricted to mean kist paid in instalments to Government. On has already been referred to as an instance of restriction in modern Tamil where it means ghee. In ancient Tamil, it was any oily substance. butter, ghee, oil, honey or grease. பழையது has a general sense of anything old and the restricted sense of rice cooked and preserved in cold water. # min min from Sanskrit curna has the restricted sense of chunam as well as the general sense of powder. urssis a Sanskrit derivative. meaning 'a foreigner' but, as many of these people from other than Tamil country went about begging their food, it is now generally employed in the sense of a mendicant. கொழுனன் was formerly the husband or the husband's brother. Now it means only the husband's brother. ஐவான், a word borrowed from urdu meant any strong man. Now it has come to be restricted to a constable or a peon in an office.

Deterioration or degradation of the meanings of words

The history of words often reveals the degradation of meaning that some of them suffer in course of time. Originally without any bad meaning, they come later to be used in a bad sense as a result of what might be called the principle of association.

The Tamil word அயலான் means neighbour, but as neighbours are often in bad terms with each other, அயலான் has come to mean also enemy. To pioin old Tamil meant simply smell, good or bad, in modern Tamil it is generally used only of bad smell womin being used of good smell. speak of இனியாரற்றம் to-day would be pedantry. ஆபாஸம் or ஆபாசம் is a Sanskrit word borrowed into Tamil and meant only false appearance. It is now used in Tamil in the sense of dirt or filth. Degradation in meaning cannot go further. அண்ளுத்தை is only elder brother, but as elder brothers are prone to idleness and dullness when compared with their younger brothers, it has come to be employed in some Tamil districts in the sense of an idler. The is a loan word from Mahrathi and meant at first labourer or digger of earth. As labourers are associated in the mind with idleness and a proneness to scamp their work, it is now used in Tamil for fool, idiot, or dunce. காலாடி was originally an energetic person, then a vagrant, and is now a rogue. (த்திரைக்காரன் first meant a mounted warrior and was later employed for a plundering trooper. குப்பை is from the Sanskrit gumpha (a collection). In old Tamil it is often used in a good sense as in சாத்திரக்குப்பை but in modern Tamil குப்பை is invariably used for rubbish. சால்ஜாப்பு, a loan word, meant at first answer and is now used for a lame excuse. செறக்க was originally a girl or maidservant and is now a term of contempt like the English

word wench which has undergone a similar degradation. கத்திwas originally a dancing woman as dancers are generally loose in their morals, the word & \$\delta \beta \beta\$ has now come to mean concubine or prostitute. With this may be compared தேவடியாள். Originally a word denoting a woman devoted to the service of a deity in a temple, it has now the bad sense of a prostitute or courtesan by the principle of association. Like the English word knave which orginally meant servant but now means rogue, the Tamil பையல் was in old Tamil a boy and is now a mean fellow. விகாரம் is a loan word from Sanskrit and meant formerly 'change.' Now it has degraded in meaning and means an ugly change or distortion. தகப்பன்சாமி is primarily the name of the god Subramanian who, according to legend, was the preceptor of his own father, the god Siva. It was a title of esteem but now it is degraded to mean any headstrong fellow. வழிச்சோற simply meant food taken by a traveller to eat during his journey. It is more often used now for the food that is given to a poor man so that it might serve as viaticum for a departed spirit. The change of meaning in the Tamil word follows closely that of the Sanskrit word patheya. அக்கா or அக்காள் means, of course, elder sister but it has also a degraded sense and is used of a woman bringing ill-luck to the family (from Lakshmi's elder sister). எங்கு is employed in ancient literature only in the sense of growth or increase. It has now deteriorated to mean a swelling or inflammation in any part of the body. முத்தண்ணு, like the slang அண்ணுத்தை referred to before is often a term of contempt for a lazy fellow, a ne'er-do-well. டிவேயாளபகவதி means literally the goddess Durga worshipped in Malabar. As she is believed

to be the patron deity of magicians and sorcerers, the word is now used of any one who deceives under false pretences. பலர்புகல் is a word used in older Tamil literature for proclaiming, whether what is proclaimed is good or bad; now it means only lamenting. under or, to use the proper Tamil form, பரியாரி is a Sanskrit word taken into Tamil. It meant a physician who applies remedies; as many uff கரியான் were of the barber caste and actively followed that profession too, it has come to mean a barber. படையன் originally was a cook serving in the மடை or மடைப்பள்ளி or kitchen. Only men too dull to follow the higher professions would take to the kitchen; hence மடையன் now means not a cook but dunce. ஜாடுமாலி or சாடுமாரி is from the Urdu jharmali meaning woman sweeper and has suffered degradation denoting at present a despicable person.

Elevation or Exaltation of Meaning

The opposite process of a word acquiring, in course of time, a more dignified or exalted sense than it originally had is also met with in Tamil though elevation of meaning is not so common as degradation. According or According means primarily mother, but has also the exalted sense of Parvati, the universal mother. So also According, which signifies father or uncle is sometimes employed in religious literature for God. According, which literally means a glance of the eye is used generally for a gracious look. Andie Gruch borrowed from Sanskrit, means literally spending one's time but is restricted to spending one's time in listening to a story of Vishnu or other gods in what are called Harikathas. The exaltation is seen also when it is used by Brahmins for a study of Vedanta. According to

merly meant cloth in general, is now used only of the auspicious sarce in which a bride is dressed just at the time when the tali is tied round her neck. As Sanskrit (Sila= a stone) means stone and has also the more dignified sense பிள்ளேயார் has alof the image of a god carved in stone. ready been given as an example of restriction of meaning. It is also an instance of elevation of meaning. In fact many of these words which have undergone degradation or elevation may be said to have undergone restriction of meaning; but simplicity of classification should not make us lose sight of the mental process underlying the restriction. முகூர்க்கம், taken from Sanskrit, means primarily a period of time equal to an hour and a half, but is most commonly employed for an auspicious part of the day suitable for weddings or other religious rites of a festive nature. **விக்கிரக**ம் (Sanskrit, vigraha) means, primarily, the body of a person, but is a common appellation for the images of மடி.. literally means cloth folded, but has become exalted in sense to denote only cloth that is ceremonially நாச்சியார் pure and fit to wear during religious observances. was formerly applied to any highborn lady, princess or queen as may be seen in its cognate form in Malayalam netuaramma the title given to the Maharaja's consort in Cochin. & p has the primary meaning of ashes and also the more dignified sense of sacred ashes for smearing the forehead or other parts of the body with. பத்தினி derived from Sanskrit patni not only means wife in Tamil, but wife conspicuous for chastity.

Transference

There is yet another principle or process observable in the way words change their meaning. It has been called

transference. Take the word பொங்கல், for instance: it means boiling but, by transference, பொங்கல் has come to mean rice boiled with green gram. The transference is from the process of boiling to the product of boiling. means primarily squeezing but has a secondary meaning honey by transference from the act of squeezing the comb to the resultant product.In the sentence அந்தப்பாச்சா இங்கே பலியாது, பாச்சா means show of power and is by forgotten metonymy transferred from badshaw the title of the Moghul rulers of old. some and some, meaning cloth and towel (or piece of cloth), are transferred from the verb some (cut) as the weaver, having woven a long cloth. cuts it afterwards into several pieces or garments. The modern word sign is a derivative of the Sanskrit word tantri meaning wire. தந்தி as in தந்தியடிக்கவேணும் means telegram or message sent by wire (cf. kambi the Malayalam equivalent which also means telegram). The transference is from the wire to the message conveyed with the help of the wire. Getic means copper and by transference also a vessel, since many of such vessels were formerly made of copper. The underlying principle is metonymy consciously or unconsciously working in the minds நாமம், the castemark of the Vaishnavaites, is also an illustration of transference. These marks should be put on by a Vaishnavaite with the utterance of some of the nama's or names of Vishnu. ஸம்ஸாரம், originally as in Sanskrit, the cycle of births and deaths resulting from karma has come to mean wife in Tamil, because the most prominent feature in the life of the Samsarin is the wife. shows transference from the process of rolling up to the product of the roll, namely, the cigar and is also an

example of specialisation. Bissi has had a curious history. In early and literary Tamil it means primarily the moon. Then by transference தங்கள் came to mean also the month as in மார்கழித்திங்கள், since the moon's revolution round the earth marks the lunar month. when the seven days of the week came to be adopted from the semitic races, the seven days came to be called by the names of the seven planets (the sun being considered as a planet). In Canarese and other cognate languages Somavara is the moon's day or Monday, the Sanskrit word Soma being taken for the moon. Tamil did not the Sanskrit word Soma for the day of the week and called திங்கட்கிழமை using the native திங்கள் for the moon. திங்கள் standing both for month and for the day of the week was felt to be ambiguous and the Sanskrit word masa was therefore modified to ωτρώ and used for month திங்கள் being generally reserved for the week day. late. however. the Of tendency among purists to avoid using foreign words in Tamil has led many to give up மாதம் for month and revert to திங்கள் as of இந்த வைகாசித்திங்கள் இருபதார்தேதி திங்கட்கிழமை may be found in invitation letters or announcements. The ambiguity has to be resolved from the context. 5700 x வார்க்கல் means, in Madras Town and the adjacent districts, to lose. The forgotten metaphor underneath this word is the giving away of a girl in marriage by her parents pouring a stream of water on the hand of the bridegroom. Whenever anything is given away as a gift, this pouring of water is enjoined for the ritual. So the act of pouring water in a stream smooth has come to mean to give away or rather to lose. அம்மணம் now means naked or nakedness and is a forgotten metaphor from the Sramanas or Jain

saints who renounced even clothes. போடுவான் means soft well ground flour of black gram mixed with water but literally signifies that which is put into or mixed with rice flour mixed with water for making தோசை or இட்டலி. is a case of transference from the act to the thing that the action is concerned with Amstic is a loan word from Sanskrit and meant originally 'day' but, by transference, it is now invariably used for the ceremony performed on the anniversary of a person's death. So also \$\beta\$. (literally mother) which means small-pox illustrates the transference to the disease from the goddess (mother) or மாரியம்மன் who is believed to be the cause of the disease. ஆஸ்கா, meaning crystalline sugar is the name of one of the places where it is manufactured. அஷ்டலஹஸ்சம் is a Sanskrit word meaning eight thousand. From the number the word is now transferred to the community of South Indian Brahmans whose families originally numbered 8000. The word now means only a member of that Brahman sect. 2000 is interesting for its changes of meaning. Primarily it is a palmyra leaf. Since it was formerly used for writing on, pa came to mean also letter. A small piece of the coloured leaf was formerly made into a tiny roll and worn by women in their ears which had sufficiently large holes made in them for the purpose. As civilisation advanced, this roll of leaf gave place to a roll of gold; and now diamond ear-rings have taken the place of the old and are often called marpen if they are bigger in size than the G of G. B is a loan word in Tamil from urdu jhatka where it means quickly (cf. Skt. Jhatiti-quickly. Now it has come to mean a cart drawn by a horse or pony as horses were in pre-steam emgine days considered to be the fastest of means of transport. The English word number (கம்பர்) has been borrowed into Tamil and has come to mean a case for trial in a court as these cases are given numbers in serial order when they are filed in courts. போன் is really பெயான் (namesake) one who has the same name; but it has come to mean grandson as grandsons in Hindu families are generally given the names of their grandfathers. சோம்பற் சாவடி (a lazy fellow) is a case of transference from the place where idlers sit to the persons who sit there.

Among instances of transference of meaning due to resemblance or metaphor may be mentioned 4### is used to mean the remainder, the original meaning of the word in Sanskrit being tail. புள்ளடி (புள் bird அடி literally means bird's toot and now denotes the mark A placed below a line of writing to show the place of omission; the resemblance between it and the impression of the bird's foot has been forgotten. and is often used in conversation of mischievous boys, the resemblance being presumably to the tail of a lizard or other reptile moving about actively even after it has been cut off from the body of the animal. Upon is often used for snake since it is thought inauspicious to use the word $u\pi \dot{b} u$ at night. பறை மேனம் means literally the drum used for proclamations in streets; metaphorically it has come to mean one who cannot keep a secret, though the metaphor is now forgotten. The English word 'club' has had a curious history in Tamil. Its meaning in English of 'an association of persons united by some common interest and having premises for resort, meals, temporary residence" was ignored when it was borrowed into Tamil. From the band of men, the meaning of the word was transferred to one of their activities and that the least important viz. eating and the

Tamil word came to mean an eating house. A further development has occurred in the compound word word word whose for non-vegetarians obviously from the fact that military men insist on having meat for their food. whose for military men in the least an eating house for military men.

Euphemism

Changes of the meanings of words are sometimes due to an aversion to call a spade a spade in the matter of death ill-luck and the like. Men shrink from the blunt expression 'so and so died'. They resort to a euphemistic expression like "He breathed his last" or "He is no more." In Tamil காலஞ்சென்றுன் literally 'pass the times' is a eupliemism for 'died' த 2 சாய் தல் literally 'hang the head' is another euphemism for the act of dying. Vaishnavites euphemistically say அவர் ஆசாரியன் திருவடியை யடைந்தார் (literally: he has reached the feet of his guru) or இருநாட்டை யலங்க ரித்தார் (literally: he has become an ornament of the celestial world) instead of saying 'he died' which appears perhaps brutal in its bluntness. Likewise saivites say சென்றுர் (literally: he has gone to the world of Siva). Euphemism underlies also the word நாலி முர்தவள் for a widow (literally a woman who has lost the thread). வித்தியாசம்(literally the difference of time) means in present day Tamil 'bad times'. Prudishness in speech considers certain words connected with sexual life indecent and resorts to euphemistic usage. Andi (literally distance) is used of a woman when she is in her periods because she remains at a distance from others to avoid polluting them. அவள் பெரிய மறுஷியாளுள் (literally she became a big woman) is euphemistic for 'she came of age' which is itself an euphemism in English.

Irony has had something to do with the use of words.

soin unity (the good snake) is the name given to the cobra which is the deadliest of snakes. It is difficult to say whether fear or irony has been the cause of this usage.

which is really far from being auspicious. How Gang as which is really far from being auspicious. How Gang as which literally means to make an offering, is the term colloquially used for striking a person.

Folk Etymology

The etymology of a word is sometimes forgotten and a false etymology takes its place in the popular mind and causes changes in the form or meaning of words. கீரை, should be அற கீரை, கீரை that is cut. The ignorance of etymology in the use of தணணர் and எண்டிணய் has already been pointed out. Grungio and mean in Tamil something very serious, whereas the Sanskrit original pramada means 'error' or 'mistake' கண்ணமுது is a favourite word with Vaishnavite Brahmins for பாயசம். The word is properly speaking, கன்னல் (sugar) + 4 4 5 (food) The fancied meaning of a dish liked by som or Sri Krishna has probably been, at the bottom of the error. நாட்டுப பெண் and டாட்டுப பெண் used for daughter-in-law seem to have no etymological propriety. They are perhaps corruptions of மணுட்டுப் பெண் which means 'the wedded girl.'

The examples given above of the principles underlying changes of meaning in Tamil words are by no means

exhaustive. Enough, however, has been said to indicate the different mental processes which lie at the root of such changes.

Books and pamphlets referred to: -

- 1. Tamil Lexicon: University of Madras, 6 vols.
- 2. Greenough and Kittredge: Words and Their Ways in English speech.
 - 3. Ernest Weekly: The Romance of Words.
- 4. A. C. Chettiar: The Semantic Principle of Expansion. The Journal of the Annamalai University, Vol. VI, No. 2

MAGNETIC SUSCEPTIBILITY OF METAL CRYSTALS.

By

DR. S. RAMACHANDRA RAO, M.A., D.Sc., (LOND.), F. INST. P.

Abstract.

The present paper gives an account of our present knowledge relating to the magnetic susceptibility of metal crystals. Brief references to the main developments in recent years are given. It will be seen that the contributions from the Physics laboratory of the Annamalai University have greatly helped the growth of the subject.

1. Introduction.

Study of the magnetic susceptibility of single crystals of metals has assumed considerable importance in recent years because of the theoretical interest attached to such measurements. Pauli (1926) applied the Fermi-Dirac statistics to the calculation of the paramagnetism of a free electron gas and showed that at ordinary temperatures, the gram atomic susceptibility $(\chi_A)_o$ due to the free electrons is given by the expression $(\chi_A)_c \times 10^6 = 48 \cdot 17 (q/V_o)$ where q is the number of free electrons per atom and V_o the width (in volts) of the occupied energy range in the completely degenerate state. Taking into account the Landau (1930) diamangnetism of the strictly free electrons, the above expression reduces to the following.

$$(\chi_{\rm A})_{\it e} \times 10^{6} = 32 \cdot 11 (q/V_{\it e})$$

The diamagnetism of the free electrons was shown by Landau (1930) to be given by $\chi_L = 0.623n_o^{1/2}e^{-1/2}A^{-1/2} \times 10^{-6}$

where n_0 is the number of free electrons per atom in the metal, ϱ the density of the metal and A its atomic weight. The total paramagnetic susceptibility of the degenerate electron gas is $2\chi_L$ since the paramagnetic effect due to electron spin is three times as great as the Landau diamagnetism. Peierls (1933) studied the effect of the lattice field on the diamagnetism of metals.

2. Experiment.

Metallic single crystals have in general been prepared by the method of Bridgman (1925). The tube containing the metal is passed through an electrically heated furnace, the temperature inside being regulated to be about 30°C above the melting point of the metal. Goetz and Focke (1934) prepared bismuth crystals having any desired orientations by initially attaching seed crystals to the rods. Schoenberg and Uddin (1936 a and b) prepared small beads of bismuth metal and converted them into single crystals by cooling them very slowly through the melting point.

The Gouy method has been adopted by various investigators. Consider a single crystal having the shape of a cylindrical rod arranged with one of its ends between the two parallel pole faces of an electromagnet and its cylindrical axis normal to the direction of the field. All the metal crystals so far studied have two principal susceptibilities one (x_{ij}) parallel to the axis of symmetry and the other (x_{ij}) normal to this axis.

Let the angle between the principal axis of the crystal and the cylindrical axis of the rod be φ . The plane through

these two axes intersects any horizontal section of the crystal along a straight line. Let θ be the angle which this straight line makes with the direction of the magnetic field. It may be shown that the magnetic susceptibility \mathbf{x}_{θ} in this position is given by

$$\alpha_{\theta} = \alpha_{\perp} (\cos^2 \varphi \cos^2 \theta + \sin^2 \theta) + \alpha_{\parallel} \sin^2 \varphi \cos^2 \theta$$

When the crystal is rotated about the vertical axis and the Gouy forces are determined at intervals of say 15°, it is found that x_{θ} varies between a maximum and a minimum. If x_{θ} and x_{θ} be these values,

$$\chi_{\perp} = \chi_{90} \text{ and } \chi_{\parallel} = \frac{\chi_{o} - \chi_{90} \cos^{2}\varphi}{\sin^{2}\varphi}$$

The angle φ may be determined by X-ray methods, by breaking the crystal or by etching. Bismuth, zinc and cadmium crystals may be broken easily. Deformation of these crystals may be avoided by cooling the crystals to liquid air temperature and then breaking them. χ_{\perp} and χ_{\parallel} may be determined even if φ could not be directly found from the equation,

 $\chi_{\text{mean}} = \frac{1}{3} (\chi_{\parallel} + 2\chi_{\perp})$. If χ_{\perp} and χ_{mean} are determined, χ_{\parallel} and φ may be easily calculated.

Schoenberg and Uddin (1936a) used the Sucksmith balance (Bates 1939, p. 105) to find the principal susceptibilities of bismuth crystal.

3. Results. The results obtained by different investigators are given below.

Metal.	Authors.	Tempera- rature °C.	Crystal structure	χ _⊥	Z_{1i}	Aniso-tropy $\chi_{\perp}/\chi_{\parallel}$
Zinc	M.R.C.	17	Hexagonal ·	0·145	-0.190	0.763
	S.R.R.	30	packed.	0·149	0⋅2 02	0.738
Cadmium	M.R.C.	17	do.	0.160	0.261	0.613
	S.R.R. & S.S.	30		0.163	0.223	0.731
Mercury	V	-183		0.121	0·112	1.080
Thallium	S.R.R. & K.C.S.	30	Hexagonal close-	-0.165	-0.412	0.400
(a)	S.R.R. & A.S.N.		packed.	0.164	0· 42 0	0.390
Tin	Н	17	Tetra- gonal	+0.0270	+0.0241	1.120
	S.R.R.	30	Ū	+0.0400	+0.0387	1.034
Tellurium	S.R.R. & S.R.G.	30	Rhombo- hedral.	-0.296	0·329	0.900
Bismuth	G.F.	21	do.	-1.482	-1.053	1.408
	S.R.R.	30		-1.582	-1.160	1.364
	K.	17		-1.49	1.08	1.380
	S.U.	27		-1.44	-1.025	1.405
Antimony	M.C. S.U.(c)	17	do.	—0·63 —·55	-1·13 -1·42	0·558 0·387

M.R.C. McLennan, Ruedy and Cohen (1928) S.R.R. Rao (1936) V. Vogt (1934) S.R.R. & K.C.S. :

Rao and Subramaniam (1936) S.R.R. & A.S.N. : Rao and Narayanaswamy (1938) H. Hoge (1935)

S.R.R. & S.R.G. :

Rao and Govindarajan (1939) G.F.

Goetz & Focke (1934) K. Kapitza (1931)

Schoenberg and Uddin (1936a) S.U. M.C. McLennan and Cohen (1929) S.U. (c) Schoenberg and Uddin (1936c) For zinc and cadmium, χ_{\parallel} is greater than χ_{\perp} but in the case of mercury, χ_{\parallel} is less than χ_{\perp} Thallium (a) shows a remarkably small value of $\chi_{\perp} |\chi_{\parallel}$ and only antimony exhibits a still lower value. Bismuth shows a high diamagnetism and contrary to antimony, χ_{\perp} is greater than χ_{\parallel} Paramagnetic white tin shows a feeble anisotropy. Tellurium which is diamagnetic has its principal susceptibility values close to each other.

The results have been explained on various considerations. Bismuth crystals are perhaps the most interesting. Ehrenfest (1929) and Raman (1929) suggested that the high diamagnetism of bismuth and graphite was probably due to the presence of large electron orbits. Jones (1934) has discussed the high diamagnetism of bismuth by considerations of Brillouin zones in the metal lattice. An explanation is given not only for the large value of its diamagnetic susceptibility but also for the effects arising out of temperature variation and introduction of traces of foreign metals.

Rao and Subramaniam (1936) have shown that in the case of thallium at room temperature, two of the three valence electrons have their orbits in the hexagonal plane and that the other electron possesses a metallic bond. Stoner (1934) has drawn attention to the fact that in the case of zinc and cadmium the anisotropy lies in the diamagnetic part of the susceptibility.

4. Temperature variation.

The variation of the principal susceptibilities of bismuth crystal with temperature has been studied by Kapitza (1931), Goetz and Focke (1934) and Schoenberg and Uddin (1936a).

Kapitza found
$$dx_{\parallel} | d\mathbf{T} = 0.76 \times 10^{-3}$$
 and $dx_{\parallel} | d\mathbf{T} = 1.191 \times 10^{-3}$

in the range 85°K to 290°K, assuming χ to vary directly as the absolute temperature T. Goetz and Focke (1934) studied the dependence of the anisotropy on temperatures between 90°K and 543°K (melting point of bismuth). An almost linear relation between the principal susceptibilities and temperature was obtained. Schoenberg and Uddin (1936a) investigated the variation in the range 14°K to 400°K. Both χ_{\perp} and χ_{\parallel} were found to vary linearly over a considerable temperature range. Below 50°K both the principal susceptibilities become nearly independent of temperature. Schoenberg and Uddin (1936b) studied the dependence of susceptibility on the field strength at low temperatures.

De Haas and van Alphen (1930 and 1932) first showed that the susceptibility of bismuth at low temperatures is dependent on field strength. Schoenberg and Uddin (1936b) studied the de Haas and van Alphen effect of bismuth at temperature down to about 4°K. The magnitude of this effect is found to depend on alloying. These results are of special interest from theoretical considerations of bismuth crystal structure.

Rao and Subramaniam (1936) investigated the variation of the principal susceptibilities of thallium. On heating α-thallium (which is hexagonal), the structure changes to the cubic at about 230°C. This change is indicated by the magnetic properties of thallium single crystals. As soon as the temperature became larger than 230°C. the observed susceptibility was constant when the crystal was rotated. The diamagnetic susceptibility of the cubic or β-thallium was found to be 0·158. On melting at 300°C. this value became 0·131.

Schoenberg and Uddin (1936c) found that in the case antimony χ_{\perp} was constant in the range 14° to 300°K. But χ_{\parallel} was found to increase steadily as the temperature was lowered from 300°K.

The crystal diamagnetism of tellurium at temperatures ranging from 30° to 500°C. was investigated by Rao and Govindarajan (1939). The value of $K_{\parallel}|K_{\perp}$ which was found to be 1·11 at 30°C. decreased gradually to 1·00 at 220°C. and remained constant thereafter till the melting point was reached. What is of special interest is that K_{\parallel} decreased while K_{\perp} remained constant in the range of temperatures 30° to 220°C.

5. Effect of alloying.

Goetz and Focke (1934) carried out an extensive series of experiments on the effect of impurities of foreign elements added to bismuth. They showed that the magnetic anisotropy increased when the impurity is electropositive and decreased when electronegative.

 $\gamma_{\perp} | \chi_{\parallel}$ is increased by the addition of tin (which is electropositive with respect to bismuth) and is decreased by the addition of tellurium. Schoenberg and Uddin (1936a) arrived at similar results and showed that $\chi_{\parallel} | \chi_{\perp}$ is not a linear function of temperature. Mott and Jones (1936) have explained these variations from the point of view of Brillouin Zones in bismuth.

Rao and Narayanaswamy (1938) found that $\chi_{\parallel}|\chi_{\perp}$ of α —thallium was decreased by lead or tin, while cadmium increased this value. Tin was nearly two and a half times as effective as the same atomic percentage of lead. The principal susceptibility χ_{\perp} of cadmium was found by Rao and Sriraman (1938) to decrease by the addition of small quantities of lead. Small amounts of zinc did not influence the anisotropy of cadmium. The principal diamagnetic susceptibilities of tellurium showed a decrease in value due to small admixtures of tin, cadmium, bismuth and lead. The decrease was found by Rao and Govindarajan (1939) to be dependent on the atomic radius of the element introduced.

6. Influence of cold-working.

The influence of cold-working on the principal susceptibilities of bismuth, zinc and tin crystals were studies by Rao (1936). Bismuth crystals showed a decrease in susceptibility, this decrease being of the same order of magnitude as in the case of polycrystalline bismuth. Zinc crystals showed a small decrease in the principal diamagnetic susceptibilities on cold-working. Tin crystals had their paramagnetic susceptibility lowered slightly by tensional stress.

The influence on magnetic properties of boundaries of the small crystals in polycrystals was also discussed.

REFERENCES

Bates (1939) Modern Magnetism.

Bridgman (1925) Proc. Amer. Acad. Sci. 60, 305.

De Haas and van Alphen (1930) Comm. Phys. Lab. Leiden No. 212-a.

De Haas and van Alphen (1932) Comm. Phys. Lab. Leiden No. 220.

Ehrenfest (1929) Physica 5, 388.

Goetz and Focke (1934) Phys. Rev. 45, 170.

Hoge (1935) Phys. Rev. 48, 615.

Jones (1934) Proc. Roy. Soc. A, 147, 396.

Kapitza (1931) Proc. Roy. Soc. A, 131, 271.

Landau (1930) Zeits. f. Phys. 64, 629.

McLennan and Cohen (1929) Trans. Roy. Soc. Canada 23, 159.

McLennan, Ruedy and Cohen (1928) Proc. Roy. Soc. A 121, 9.

Mott and Jones (1936) Properties of metals and alloys.

Pauli (1926) Zeit. f. Phys. 41, 81.

Peierls (1933) Zeit. f. Phys. 80, 763.

Raman (1929) Nature, 123, 945.

Rao (1936) Proc. Ind. Acad. Sc. 4, 186.

Rao and Govindarajan (1939) Proc. Ind. Acad. Sc. 10, 235.

Rao and Narayanaswamy (1938) Phil. Mag. 26, 1018.

Rao and Sriraman (1938) Proc. Roy. Soc. A. 166, 325.

Rao and Subramanian (1936) Phil. Mag. 21, 609.

Schoenberg and Uddin (1936-a) Proc. Roy. Soc. A. 156, 687.

Schoenberg and Uddin (1936-b) Proc. Roy. Soc. A. 156, 701.

Schoenberg and Uddin (1936-c) Prof. Camb. Phil. Soc. 32, 499

Vogt (1934) Ann. der Phys. 21, 791.

THE THERMAL ENERGY OF CRYSTALLINE SOLIDS

By

SIR C. V. RAMAN, KT., F.R.S., N.L.

1. Introduction.

The first great step towards the development of a satisfactory theory of the specific heat of solids was taken by Einstein (1907) when he showed that the acceptance of the hypothesis of radiation quanta involves as a necessary consequence that the mechanical energy of the vibrations of the atoms in a solid must also be regarded as consisting of discrete units or quanta proportional to the frequency of vibration. A quantitative relationship between the heat content of a solid and the "frequency spectrum" of its internal vibrations is thus indicated. The evaluation of the thermal energy depends on a determination of this spectrum, namely, a knowledge of the frequencies of the atomic vibrations and the manner in which the available degrees of freedom are distributed amongst them. This is a problem of some difficulty, to the solution of which there are two distinct methods of approach. The first is the phenomenological one, namely, that of obtaining the desired information in some independent fashion e.g., by spectroscopic research. The other is the a priori method of finding the possible modes of vibration from a knowledge of the crystal structure and the forces acting between the atoms, by a dynamical investigation. To the genius of Einstein we owe the first indication of both of these methods of approach to the specific heat problem. The reconciliation of the results obtained by the two methods with each other and with the specific heat determinations over a wide range of temperature is obviously of the highest importance to a proper appreciation of the physics of the solid state of matter.

2. Discrete versus Continuous Spectra.

In his first paper, Einstein adopted the phenomenological approach provided by the fact that infra-red radiations of specific wave-lengths are strongly reflected by many crystals, indicating that they possess characteristic frequencies of internal vibration. It is natural to assume that this is a very general feature of the crystalline state, and hence that we are justified in assuming the infra-red spectrum to consist of monochromatic radiations whose frequencies correspond to certain specific modes of internal vibration. Einstein had no difficulty in showing that the facts then known concerning the specific heat of many solids were broadly in accord with his ideas. He even ventured to calculate the characteristic frequency of diamond from the specific heat data and to suggest (1907) that this calculated frequency might possibly be "inactive" in infrared absorption. There are however, many solids e.g., metals, for which infra-red spectroscopic data are not forthcoming. To meet such cases, Einstein (1911) showed that the atomic frequency v could be approximately connected with the bulk modulus K of the solid, its density e and the atomic weight M by the formula,

$$v=2.8\times10^{7}\cdot M^{-\frac{1}{2}}\cdot \varrho^{-\frac{1}{6}}\cdot K^{\frac{1}{2}}$$
 .. (1)

The Einstein formula for the specific heat even with a suitably assumed atomic frequency deviates from the facts at very low temperatures. To explain this deviation,

Nernst and Lindemann made their well-known suggestion that even in the case of elementary solids, two characteristic frequencies have to be considered, of which one is half the other, equal weight being assigned to both. A notable improvement in the agreement with the experimental facts was thereby obtained. Lindemann also suggested a semi-empirical formula connecting the frequency ν with the atomic weight M, the atomic volume ν and the melting temperature T_m of the solid, namely,

$$v=2.12\times10^{12}\sqrt{T_m/Mv^{\frac{2}{3}}}$$
 .. (2)

giving values of ν in fair agreement with (1).

Starting from the idea that the thermal energy in the solid could be identified with the energy of ordinary elastic solid vibrations, Debye (1912) put torward a theory of specific heats which gained general acceptance. Elastic waves can be propagated in any specified direction within a crystal with three different velocities; one of these waves is approximately longitudinal and the other two are approximately transverse. The possible frequencies of stationary vibration are determined by these velocities and by the dimensions of the crystal. It is a feature of Debye's theory that the frequencies of all the three possible types of wave-motion are assumed to have an identical upper limit determined by the equation,

$$3N = S_{\delta}^{v_{max}} \left(\frac{2}{c_1 3} + \frac{1}{c_2 3} \right) V^2 d = \frac{4\pi V}{3} \left(\frac{2}{c_1 3} + \frac{1}{c_2 3} \right) V_{max}^{v_{max}}$$

where N is the total number of atoms, V is the volume of the crystal, c₁ and c₂ are respectively the velocities of transverse and longitudinal waves. The "frequency spectrum" is thus a continuous one; the number of degrees of freedom assigned to a given frequency interval increases with the square of the frequency and the spectrum terminates sharply at the assumed upper limit.

3. Some Remarks on the Debye Theory.

A justification may be sought for assuming an upper limit of frequency for the possible stationary vibrations of an elastic solid in the view that the lattice spacings in the crystal necessarily set a lower limit to the possible wavelengths of such vibration. It is readily seen that such limitation of wave-length is equivalent to the limitation of the number of degrees assumed by Debye. On this basis, however, there should be separate limits of frequency for longitudinal and transverse waves, since the velocity of the latter is much smaller than that of the former. In Debye's theory however, no such distinction is made. Hence, we should regard his formula (3) as a semi-empirical relation between the highest possible atomic vibration frequency and the elastic properties of the solid. Indeed, taking the value of Poisson's ratio as 3, formula (3) may be written in the form

$$v_{max} = 3.6 \times 10^7 \cdot M^{-\frac{1}{3}} \cdot e^{-\frac{1}{6}} \cdot K^{\frac{1}{2}}$$
 .. (4)

which is identical with formula (1) due to Einstein except for a somewhat larger value of the numerical constant. It is thus clear that the Debye theory is based on a hypothesis regarding the vibration spectrum which, however plausible it may appear, is essentially arbitrary. That the Nernst—Lindemann formula which considers only two discrete frequencies gives the specific heat correctly over a fairly wide range of temperature indicates that widely divergent assumptions regarding the nature of the vibration spectrum

may be consistent with the specific heat data. The basic question whether the spectrum is discrete or continuous can therefore be answered only by independent spectroscopic research. Prima facie, however, it is highly probable that the vibration spectrum includes a low-frequency part of the same physical nature as the ordinary acoustic or ultrasonic vibrations in the solid. This can be regarded as a "continuous" spectrum when the half-wave length is sufficiently large in comparison with the lattice spacings of the crystal. Its contribution to the specific heat would be relatively small at ordinary temperatures but would become important at low temperatures, which is precisely the region where the Debye formula has had its principal successes. On the other hand, the specific heat data do not compel us to accept the idea that the atomic displacements of higher frequencies have the same physical nature as the ordinary elastic solid vibrations. They appear to be quite consistent with the supposition that even in the simplest crystals, and at ordinary temperatures, the thermal energy. instead of residing wholly in a continuous spectrum of vibrations as postulated by Debye, is only to a small extent associated with a spectrum of this nature appearing in the region of low frequencies; much the larger part of the energy might well be carried by vibrations with discrete frequencies appearing as lines in the near or remote infrared spectrum.

4. Evidence from Light Scattering.

A powerful method for the spectroscopic study of vibration spectra was furnished by the present writer's discovery made early in 1928 that the spectrum of the light scattered in transparent crystals includes radiations of altered frequencies. Many substances have since been in-

vestigated by this method and a wealth of data has come to hand which is of the highest significance to crystal dynamics and specific heat theory. Two broad results have emerged from such spectroscopic observations. is a striking confirmation of Einstein's idea of 1907 that the vibrations of the atoms in elementary solids as well as in more complicated compounds are monochromatic. lines of displaced frequency observed are, in general, ex-It is perhaps not surprising that this tremely sharp. should be the case for the frequencies which roughly correspond to those observed as fairly sharp lines in the melts or solutions of the same solid. Significantly enough, however, it is also true for the lines representing frequencies which are characteristic of the crystalline state and are either not represented in the fluid state or else appear as diffuse continua in the latter condition. Numerous such lines (usually with small frequency shifts) may be observed even with crystals of fairly simple composition.

The second broad feature revealed by the study of light scattering is that the number of discrete lines observed in the spectra generally much exceeds the number of the so-called internal vibrations usually represented by Einstein functions in the expressions for the specific heat of a crystal. Since all such lines represent modes of vibration with specific frequencies, additional Einstein terms must necessarily be added to represent their contributions to the specific heat. Since their frequencies are generally very low, these terms carry a considerable fraction of the thermal energy even at low temperatures. Accordingly, both the number of degrees of freedom and the actual proportion of the thermal energy which can be assigned to the elastic solid vibrations of the crystal is greatly reduced. Indeed,

the spectroscopic facts compel us to recognize that the proportion of the thermal energy which is identifiable as vibrations of the elastic solid type in crystals is usually far smaller than has hitherto been supposed. We may go so far as to say that the thermal energy, instead of being wholly or largely representable by Debye functions at ordinary temperatures, includes in most cases a part so representable to a very minor extent.

5. Some Illustrative Examples.

The relative unimportance at ordinary temperatures of the contribution to the specific heat made by the elastic solid vibrations in a crystal may be illustrated by selected examples. Amongst elementary solids, we may take the cases of the three elements which are transparent to light; namely diamond, sulphur and phosphorous. The spectroscopic data for these substances completely contradict the idea that a continuous vibration spectrum is the principal carrier of thermal energy.

In the case of diamond, we have several distinct sources of information regarding the nature of the lattice vibrations namely the scattering of light, infra-red absorption, ultra-violet absorption, and luminescence. All the evidence indicates that there are numerous types of lattice vibration in diamond represented by definite frequencies. These fall into two groups, the leading members of which are respectively, a vibration of frequency 1332 cm⁻¹ and another at 790 cm⁻¹ in spectroscopic units. A detailed discussion of the specific heat data for diamond by Mr. V. B. Anand is being published shortly which indicates that nearly the whole of the thermal energy of diamond is carried by these two sets of monochromatic vibrations.

The case of sulphur has been studied and discussed in relation to the specific heat data by R. Norris (1941). Assuming that sulphur is present in the crystal in the form of S₈ groups, 18 out of the 24 degrees of freedom of the atoms in each group have been assigned from the spectroscopic evidence to the internal vibrations of the group and 3 to its rotational oscillations. The three latter appear in the spectra as lines with frequency shift of 50 cm⁻¹, 50 cm⁻¹ and 85 cm⁻¹ respectively. Thus only one-eighth of the total number of degrees of freedom remains with unidentified frequencies which could possibly be associated with vibrations of the elastic solid type in the crystal.

The case of phosphorus is of special interest. There is evidence that the substance both in the liquid and solid states consists of P4 groups, the face-centered cubic lattice of the crystal containing four such groups per unit cell. The internal vibrations of the P4 group are completely represented in light scattering and are responsible for 6 out of the 12 degrees of freedom. The spectrum shows no lines which could be ascribed to the rotational oscillations P₄ group. \mathbf{It} mav be presumed. ever, that they exist and have specific frequencies associated with three more degrees of freedom which fail to appear in light scattering owing to the tetrahedral symmetry of the group. The spectrum of the crystal exhibits a sharp line with a frequency shift 32 cm⁻¹ (C. S. Venkateswaran, 1936) which however disappears in the melt. This coincides approximately with the calculated Lindemann frequency and may therefore be ascribed to the translational oscillations of P4 groups in the crystal lattice. Thus, no more than 3 out of the 48 degrees of freedom associated with the 16 atoms in the lattice cell can be assigned to

elastic solid vibrations of the kind contemplated in the Debye theory.

6. The Case of Quartz.

A very complete experimental study and theoretical discussion of the case of quartz has been given recently by Mr. B. D. Saxena (1941) and is very illuminating. He considers the unit cell of the crystal to contain three SiO2 groups, the total number of degrees of freedom per unit cell being therefore twenty-seven. Out of this number, only three degrees of freedom, namely the three translations of the unit cell are associated with vibrations of the elastic solid type. The remaining twenty-four degrees of freedom must therefore be assigned to specific lattice vibrations of the monochromatic type. The application of group theory enables these twenty-four modes of vibration to be classified according to their symmetry characters. The possibility of their appearance as discrete lines in light scattering and in infra-red absorption in specified circumstances can also be predicted. A correlation with the spectroscopic data shows a very complete agreement with the theory, enabling the observed frequencies to be referred to one or the other of the possible symmetry types of vibration. Finally, a calculation is made of the specific heat of the crystal. This shows a remarkably close fit with experimental data over the whole range of temperature from 20°T to 800°T. The calculation shows that the Debye contribution to the specific heat is a major part of the whole only up to about 75°T; at 300°T it is only one-fifth and at 800°T only one-eighth of the actual specific heat.

THE POETS AND THE PATRONS OF THE TAMIL LAND

By

E. S. VARADARAJA AIYAR, B.A.

It is an established fact that Literature and Art flourish where there is proper State encouragement. The period in the history of Tamil Literature viz., the first century of the Christian Era has been called the Augustan age of Tamil Literature. This period, it is well-known, coincides with the benign rule of the Cera prince Senguttuvan. This prince as well as his illustrious predecessors and contemporaries, the kings of the Cola and the Pandya Kingdoms have been eulogised by the learned scholars of the time. These three great crowned kings of the ancient Tamil land had been solely responsible for the growth of excellent Tamil Literature especially poetic literature.

It is also generally known that in any age or clime poetic literature often precedes prose literature. The former by its concise nature, is often easily memorised and in the days when printing was not even dreamt of, no other literary form could so easily have preserved the noble thoughts and the valuable traditions of our ancestors. The poets themselves were scattered in different parts of the Tamil land, but all of them met at Madura, the famous seat of Tamil learning, that being the place where as tradition will have it, the three great Tamil Academies once existed.

It is not the purpose of the present article to give or trace the history of these noble academies which have done so much for the enhancement of Tamil Literature. The materials for its history are few and what little we know of these great assemblies is limited to our knowledge of the third academy or the Kadaiccangam. The real Tamil treasures which are the outcome of the extraordinary intellect of our ancestors belong to the above third Academy and even to this day the Tamilian looks back with respect and gratitude to the famous authors who composed the works of the period and who are known by the respectful appellation of Fring Grain.

In one of the old stanzas we have this assembly of poets likened to a beautiful garland or necklace interspersed with the various precious gems. As these gems, though born in different places unite in the necklaces so also the poets who were born in different places gathered together at Madura, the seat of Academy. They belonged to different castes and creeds and each one's calling was different from the other. They were well-versed in the different arts and we can trace in their poems their beautiful knowledge of the world. Even the kings of the time were great Tamil scholars and we have excellent specimens of their poems in the Sangam anthologies. Ilangovadigal, the author of the immortal classic Silappadikaram was a Cera prince.

It was a remarkable feature of this period that there was actually no religious or communal quarrels. All the learned poets assembled in common ground and their only aim was to foster good, enduring Tamil literature. Not confined to the four walls of an educational institution their knowledge of the world and nature was something marvellous and one has simply to turn over a few pages of the old anthologies if he wants to realise the peculiar and pleasure-

1. Puram (218),

able effects of their magic touch. The best ideas had been put in the best possible form and similes and metaphors had been culled from the broad nature and its environs. Not obsessed by narrow feelings of caste or creed, they were able to give their best talents to the poetic composition with the result that we have now hundreds of stanzas full of poetic beauty and charm. This absence of communal feeling, however, tended to create amity and perfect unity among these noble savants. Real education and literary attainments of a high order were all what they wanted and literary celebrities were much respected. Poets like Kapilar and Paranar have elicited admiration even from their compeers in the Academy. In stanza 183 of Purananuru, we have the lofty ideas of one Ariyappadaitanta Nedumceliyan. In the poem he says that it is always better to learn ungrudgingly at the feet of a master rendering him proper obeisance and substantial help monetary or otherwise, that even among the sons born in the same family the mother has a tendency to prefer the educated son to others, that the king is always after the wisest man in a family and not the oldest, and that it is a common feature observable everywhere that even a person born high in social status would stoop down to learn under a teacher, though the latter might be born in a status lower than his, as real knowledge knows no caste.

These high principles characterised the poets of yore, who have handed down to us real poetry full of feelings and natural grandeur. Observations of nature and similes drawn from them abound in their poetry. A few of them may be quoted. A sensitive balance is compared to balanced judgement. The swordsmen in battle array have been compared to big white fish drawn together; the elephant weltering in the battle-field with its trunk cut is likened to

a plough share. The irredeemable nature of a place conquered by a king is compared to water strewn on red-hot iron. The instability of the world has been well brought out by likening it to the part played by the actors in a drama or kuttu. The king's concealed anger is compared to that of the elephant, which, remembering the stone thrown on it was watching to deal with the offender. The continued march of poets and bards in search of literal patrons who could appreciate their art and offer them presents is likened to the various streams which take their rise in hills and flow in the plains towards the sea. The double nature of the king viz., his easy accessibility to his admirers and his sterness to his enemies has been compared to that of an elephant which while bathing allows even young children to handle its tusks and which however while in rut threatens to destroy everything that crosses its path. The munificent patron is often compared to a solitary fruit-bearing tree in a long dreary forest entirely void of tree-shade.

Among the poets we find a decent number of women also. It will thus be seen that women in these days had some real freedom and that good educated ladies did find their honourable seats side by side with the men-poets. Even wives of kings had been good poetesses as will be seen from the Sangam collections that have come down to us. Kakkaipadiniyar, Koppendu, Adimandiyar, Auvaiyar and the highly accomplished daughters of the liberal chieftain Pari were some of the women poets.

Leaving these aside let me now see the role actually played by these poets. Some of them had actually served in the capacity of ministers. The lyrics and the elegies composed by them on their patrons are innumerable and they are full of feeling or pathos. As advisers, as intermediaries even in the private quarrels or misunderstandings

between the king and his consort, as promoters of peace between rival kings, as people who created strifes or put an end to them, they had been of incalculable service in those The confidence and the absolute reliance remote days. based upon these poets by the then kings and chieftains are things which every Tamilian must cherish and value. When we find a king like Nedumceliyan actually swearing that if he failed to capture and subjugate the enemies who spoke of him with disrespect, he shall go unsung by the learned poets who assembled in his court under the headship of Mangudi Maruthanar, our soul gets elevated and we feel proud of the exalted position our poets once occupied and the high esteem in which they were held by the monarchs. Students of Tamil literature know only too well the attempts made by no less than four poets, viz., Kapilar, Paranar, Arisil-kizhar and Perumkunrur-kizhar, to pacify Pehan an illustrious liberal chieftain of their time and to bring about rapproachment between him and his wife and the signal success that attended their noble attempts. The divine friendship of Kopperuncolan and Pisirandiyar had almost become a classic and the disgust with the affairs of the world felt by the great poet Kapilar immediately on the death of Pari his noble benefactor and his final resolve to fast unto death and not outlive him are acts highly exalted in themselves. One cannot but feel here the gratitude felt by the poet for all the services rendered by his Lord and the noble services undertook by the poet to get the daughters of his master married. Many civil quarrels and internecine disputes had been avoided by the poets' intervention at the Here is an illustration for this act of proper moment. theirs.

Nalamkilli and Nedumkilli were the scions of the Cola family. The former laid seige to Nedumkilli's capital. Now Kovur Kizhar a poet of high eminence who was a good friend of both of them addressed them as follows:

"Neither you nor your opponent wear the palmyra or the margossa flower. Both of you wear the Athi flower which is the distinguishing flower of your line. Even if any one of you gets defeated it is the cola family that is discomfited. Victory in battle for both of you is not possible. Hence it does not behove you, born of a noble line to quarrel among yourselves. This strife will only serve to get you the ridicule of your adversary. So please refrain from fighting with each other".²

On another occasion Kopperuncolan decided to wage war on his sons being offended at their misbehaviour. On seeing this one Pullarrur Eyirriyanar addressed the king thus:—

"O benign prince, your present opponents are not the Cera and Pandya who are your traditional enemies. Nor are you their inveterate adversary. When you depart this world leaving behind you your undying fame they alone are the sole claimants of your kingdom. Supposing your sons fight with you and get defeated, to whom else are you going to hand over your kingdom? If you get defeated you will be despised by all. Hence I beseech you to shake off your anger and refrain from this ignoble act.³

Further instances where the poets gave their best advice to their patrons in moments of crisis can be multiplied. They had been their keen advisers in matters of state or royal administration. They had from time to time advised them to do all possible acts to promote the welfare

^{2.} Puram (45).

^{3.} Puram (213).

of the people. Paranar in one of the stanzas in Purananuru (5) advised a Cola prince Ilancetcenni to look after the welfare of his subjects with the tenderness, care and affection with which a mother rears her young child. The great poet Kambar stresses on this sacred duty of a righteous monarch when he tells us that King Dasaratha ruled the world and looked after the welfare of his subjects as carefully as a very poor farmer will look after his small patch of cultivable land. Karikizhar, another Sangam poet praises Muthukudumi Peruvazhuthi in the following manner:—

"Oh Beautiful prince! let your parasol lower down when you circumambulate the temple of the three eyed Siva. May your munificence be discriminate. May your crowned head bow down before learned sages. May the laurels you wear fade by the smoke that shoots up from the fire which devastates your enemy's realm. May your irrepressible anger disappear before the bright faces of your beloved wives and may you live as long as the sun and the Moon."

Here we have a fair idea of the general way in which the poets of old were used to eulogise their patrons. Again in stanza 9 of Puram we are told of the righteous way in which warfare was undertaken in those days. The cows must be protected as well as the sages and learned men. The women and the sick must be saved. Due consideration must be given to those who have not borne children who alone could perform the last rites to the deceased and the usual offerings to the manes, as it was considered that people without issues could not enter heaven. Very useful advice regarding the manner in which the king should rule

^{4.} Ibid (6).

his realm is found in almost every alternate stanza of Puram. One Pisirandaiyar addressed Arivudai Nambi in the following manner. "Oh Prince, if paddy is converted into balls of rice and given to the elephants, the produce of even a small patch of land like the Ma can feed the elephant for many days. But if the elephant is left to eat the grains in the paddy field itself even hundred acres will not suffice and the paddy grains that are spoiled by being trodden by the animal will be greater than those that actually fill its stomach. Similarly, if a king exacts taxes with a certain principle, his wealth will accumulate. But if he resorts to extortion, he will soon lose his wealth and his kingdom will fall."

Besides these we are able to learn through these poems several acts committed by the victors in the places subjugated by them. It was the custom in those days to plough the tilled fields with white-mouthed asses and to spoil the drinking water tanks by driving elephants in them. Portions of conquered territory were often set on fire and women made prisoners. The gems in the crowns of the defeated kings were utilised for being set or fixed in the anklets of the winner. Castor-oil nuts were sown in the cultivated fields and the hair of women taken as captives was twisted like ropes and was used to drag the king's chariot. The spoils of victory were freely distributed to the bards, poets, augurs and others.

Let us now see the patrons who by their liberal gifts had helped the growth of literature and literary men. It was already observed that the three ancient kings the Chera, Chola and Pandiya, liberally patronised literature.

5. Puram (184).

The staunch friendship of Kopperuncolan and Pisirandaiyar as well as of Kapilar and Pari, had already been noticed. The eulogies bestowed upon Adhigaman by the poetess Auvvaiyar are very pleasant reading. When we hear that the Cera prince willingly parted with a Nelli fruit which had the virtue of bestowing immortality in favour of Auvvaiyar we are reminded of their divine friendship, and the high regard the prince had for the poetess. She, in her turn ever proud of her profound learning, condescended to praise him and even to act as embassy when asked to do The innumerable gifts made by the Cera kings to those poets who praised them have been faithfully recorded in the ancient work Padirruppattu. This work at present contains only eight sections, the first and the tenth having been lost. Each is in praise of a Cera King and from Imayavaramban Nedunceralathan up to Ilanceral Irumporai we have got a regular record of their achievements, benefactions, valour, etc. When we hear of a Cera king actually fanning a poet, who tired of walking lay on the dais intended for the royal drum or Murasu, we realise the depth to which the kings were willing to go down in order to respect real erudition. It was Karaikal Valavan that gave 16 lakhs of Pon as present to Kadiyalur Uruthirankananar for his beautful poem Pattinappalai. kadunko, a Cera king presented one lakh of Kanam (an old coin) to Kapilar for his seventh ten sung in his praise and also all the lands that could be seen by him from the top of a hill known as the Nandra hill. Last but not least we have a curious instance of a cera king actually renouncing his kingdom in favour of a poet known as Arisilkizhar for having praised him in the eighth ten of Padiruppattu. The learned poet, however, refused the offer and exhorted him to rule the realm peacefully.

Even apart from crowned kings we have a regular list of petty chieftains whose bounty has been praised in the best possible way by the bards and poets. Pari, Pehan, Nalli, Ori, Ezhini and a host of other names are familiar to the Tamil scholar. The elegies sung on the demise of kings and chieftains sung by the bards are heart-rending and every piece tells us of the benignant way in which the poets were treated by them while alive. Kapilar tells us that Pari was master of 300 villages and that all of them had been given away as presents to the bards. Pari's munificence was proverbial and his having parted with his chariot so that it may serve as a prop for the mullai creeper shows his consideration even to plants which have only one sense, viz., the sense of touch.

Regarding the elegies, one or two may be quoted here. One Aduthurai Masattanar (Puram, 227) in one of his stanzas praised his deceased patron Kulamurrattu Tunjiya Killivalayan thus:—

Oh Death! You are unwise. Inexperienced as you are you have eaten the seed that would have well sustained you. You have taken the life of one who by winning many a battle had been of immense help to you in feeding your voracious appetite. Hallo! you are to be pitied. Who else is going to satisfy your hunger?

Arisilkizhar another poet sings pathetically of his patron thus (Puram. 232):—

"Oh let me be gone along with my benefactor. What avails my lonely presence here under the Sun, separated as I am from my patron. I wonder how he, my patron is going to accept the little quantity of toddy that is to be given to him as part of the offerings which are usual for

the dead, he, who rejected outright and refused to accept territory after territory offered to him as tribute by his adversaries"!

The poetess Auvvaiyar on her bereavement caused by the death of Athiyaman Anji has sung thus:— (Puram 235)

"Oh my patron! What little was available he used to give me and feed me first. He used to sit and dine with a good number of people. All that is past. Full of valour he will not scruple to visit battlefields. That is now past. The pointed lance which was thrown by the enemy and which pierced his heart pierced also the begging bowl, the hand that bore it and the tongue of the learned bard who knows to praise in the best possible way employing well-chosen words and epithets. Hereafter no one is there to sing and nobody to be sung."

While, however, reading these elegies and other poems even a casual reader is likely to be struck by the miserable poverty of the bards, the minstrels, and the Padinis. Extremely indigent they wandered from place to place mostly in palai or dry tracts in search of benefactors who could give them food and clothing. They were expert singers and at times dancers too. Here are some pen-portraits of their extreme penury: One Odaikizhar of Turai-yur has sung of Vel Ay in the following manner. (Puram, 136):—

"Oh! of the enemies that hover round me whom am I to specify as the worst: shall I speak of the lice with their little ones sticking fast to the sides of my tattered clothes which are full of stitches like the upper side of the sound box of a guitar or yazh; or shall I refer to the

pinching hunger which torments me and my kith and kin; or shall I recount the worry caused by the high-way robbers who regardless of my despicable position rob me of what little I have. Somehow with the fervent hope that it is Ay who would realise all these, our troubles and enemies, I approached him and said "They alone who help us and relieve our distress will be reckoned as really charitable people. But those who help others placed in better status than we are, are the very men who do so expecting to be helped in turn. Hence I request you to send us away with suitable presents as befits our learning. May you live long."

Another poet Perunthalaiccathanar by name praises Kumanan thus:— (Puram, 164)

"The wife in the household is in great distress. The oven not being used for a number of days is full of fungus growth. The young ones at the breast not finding any milk there gaze piteously on the mother's face. The mother is full of tears. On seeing this I have approached you Kumana for you are the right man to be approached for relieving my poverty."

Another Unpotipacumkudaiyar has sung of Ilancetcenni. In this poem we find a humorous depiction of the poverty of the bard and the subsequent pleasure enjoyed by his children and relatives on being the recipient of innumerable presents from a munificent patron. He says, (Puram, 378):—

"My patron actually showered many ornaments on me. On seeing them my people rushed in to wear them. But as they were not used to them they wore on the ears the jewels that were to be worn on the fingers and those of the fingers in their ears. The jewels intended for the waist were worn by them on their necks and the neck ornaments were assigned to their waist." This act of theirs has been likened by the poet to that of the monkeys of Kishkinda, when they beheld the jewels which Sita threw in a bundle while she was being forcibly carried away by Ravana.

While I am here I think it will not be inappropriate if I refer to the magnanimity, boldness and self-respect that characterised these bards in spite of their impecuniosity. Here are one or two instances that may bear out the above statement. The poet Perumcittiranar approached one Veliman when he was at the point of death. His brother was however instructed to reward the poet liberally. The brother rewarded him scantily. This the poet could not brook. He discarded the small present and addressed the giver thus (Puram, 162):—

"You are not the protector of poor people. Nor are liberal patrons wanting. You will see that the world consists of very good patrons for bards like me."

Auvvaiyar when she first approached Athiyaman found him rather indifferent and somewhat slow in receiving her. Unable to put up with this she addressed the door-keeper thus:—(Puram, 206)

"Oh gateman who guards the gateway which never shuts against bards. Perhaps this Anji does not realise who I am. The world is not completely void of wise men and patrons who could help them. Hence, I am now bundling up my musical instruments and I am ready to start. For the sons of an expert carpenter the forest full of trees is highly useful and valuable. In the same way, for me who live by my learning food is sure to come whereever I go."

Having now dealt with in a way the poets and the patrons in the early centuries of the Christian Era, let me now proceed to give a short sketch of the support and patronage the Tamil literature received in the epochs subsequent to the Sangam age. About the 4th Century A.D. we hear of the earlier Colas and also of the advent of the Kalabhras. Then from the 5th Century we have a regular list of the Pallava Kings who were very liberal patrons of Arts and Literature. Both Sanskrit and Tamil were encouraged and even Buddhists and Jains received rich endowments at their hands. This period was highly prolific in religious literature and it is here that we hear of the Saiva Nayanmars and the Vaishnava Alwars who have contributed a good deal to the growth of Tamil poetic literatture especially literature of devotion. Huge temples were built by them and they were very richly endowed. These temples were great repositories of learning and several inscriptions that belonged to their reigns tell us of their munificence. Perumthevanar was patronised by Nandi varman, the Pallava King who was the victor of Tellaru and Nandikkalambagam was composed by him in praise of the king. Koccengat colan, it is said, had constructed seventy-two temples (Mada temples) for Siva and Tirumangai Alwar refers to this as well as his other benefactions for Vishnu shrines.

When, however, the Cola supremacy revived under Vijayalaya in the 9th Century, we find again great impetus given to literature and art. Rajaraja, Rajendra and other Cola Kings were very liberal patrons of art and Ottak-kuthar who was poet laureate of three Cola monarchs in succession was held in high esteem by the kings. His muvar ula and Thakkayagapparani give us much information regarding the men and things of his time. Again Kambar

who flourished in the reign of Kulottunga III has gained immortal fame by his Ramayana and we have ample evidences to prove that his patron benefactor was one Sadayappa Vallal. Kamban has praised this patron in ten places in his immortal epic. Upakara Smrithi or remembrance of one's benefactions is a very common thing observable in our poets. Pugalendi has praised his patron Chandransvargi and Villiputhurar the author of Bharatam in Tamil, his patron Varapathiatkondan.

Coming down to later times we have the bounties of the Rajas of Ramnad. The Sethu Samasthanam can boast of many illustrious poets and philosophers and the recipients of valuable gifts from the Rajas of Ramnad are legion. Besides these then were many ministers, rich landlords and madathipathies who had lent solid support to Tamil literature. Of the Saiva mutts that helped the cause of Tamil special mention must be made of Tiruvaduthurai, Dharmapuram, Tiruppanandal and the Suryanar Koil mutts. the zamindaries that promoted Tamil literature we can mention Uttumalai, Ariyalur, Ettayapuram and Marungapuri. It was the liberal munificence and the dainty food given by these patrons that were mostly responsible for the varied literature we have had in recent times. one is likely to halt here and remark with a sense of dissatisfaction that the above literature had not been up to the mark and that in point of magnanimity of style, faithful description and effective presentation our later poets have maintained only a very low standard, with the result that one perceives very great difference between the productions of these later poets and those of the Sangam period. Perhaps too much dependence of these poets on their patrons had led them to compose their prabhandams with the patrons themselves as the heroes and thus most

of them though they are very fine reading yet lack the beauty of genuine poetry based on pure nature.

Till very recently fear was entertained by all lovers of Tamil literature that it was entirely lacking in popular support and that a continuance of this state of affairs would tell unfavourably on that literature. Fortunately for the Tamil land we see the Renaissance period. This period has happily coincided with the very liberal donation of several lakhs of rupees made by Dr. Raja Sir Annamalai Chettiar of Chettinad to establish a Tamil University in the heart of the Tamil land. Among the many benefactions of the Raia Saheb this one for Vidya Danam stands supreme. Real learning Tiruvalluvar has said, does not stop with the material body but is calculated to stick to the undying Atman or soul and hence the education that one receives in one's birth will always be useful to him even in subsequent births. The many attempts made by the Raja for the amelioration of Tamil and enhancement of Tamil literature music and art have been praised all over the country. Recently his favourite idea of popularizing Tamil songs and of encouraging the composition of pure Tamil songs has been well appreciated and men of learning and musicians of high standing have already set about to respect that idea and to work for its fulfilment. One may therefore hope that this seat of learning viz., the Annamalai University will go a great way in promoting the cause of Tamil literature and that this period will stand as an epoch-making one in the history and growth of Tamil Literature, Science and Art.

A METRICAL INVARIANT ASSOCIATED WITH FOUR COPLANAR POINTS¹

By

K. RANGASWAMI,

Annamalai University.

The θ normal² at a point P of a conic is the line obtained by rotating the tangent at P, in the positive sense about P, through an angle θ . If any three points be taken on a conic it could be shown that there is a unique value of θ (mod π) such that the θ -normals at these points are concurrent. Now, given four points in a plane, it is well known that the locus of centres of the conics through the four points is a conic Γ circumscribed to the diagonal triangle A B C of the four points. In this note we seek to determine the value of θ for which the θ -normals at A, B, C, to Γ are concurrent as a metrical invariant of the four points.

Since a set of four points in a plane may be specified as the common points of the two parabolas through them, the angle in question may be obtained in terms of the invariants of the two parabolas.

- 1. The problem in a slightly different form was suggested to me by R. Vaidyanathaswamy.
- 2. For a study of the θ —normals of a conic reference may be made to (i) Cases Analytical Geometry, pp. 538-9. (ii) On the θ —normals of a conic by R. Vaidyanathaswamy Maths. Student, Vol. I, no. 4, pp. 121-130. (iii) On a metrical invariant etc., by A. Narasinga Rao and B. Ramamurti, Annamalai University Journal Vol. I, No. 2. (iv) On the quasi-normals of a conic by R. Vaidyanathaswamy, Jour. Ind. Math. Soc., Vol. 18 No. 12, pt. II, pp. 281-8.

Now, among the conics through four points there are two special members, namely, a rectangular hyperbola R and a conic of minimum eccentricity M whose axes are parallel to the asymptotes of R; the parameters of R and M seperate harmonically those of the parabolas.³ Thus, if the equations of M, R be:

$$M: \quad ax^2 + by^2 - k = 0 \tag{1}$$

$$R: \quad 2hxy + 2gx + 2fy + c = 0 \tag{2}$$

the equations of the two parabolas in the system may be written in the form:

$$P:= M + \lambda R = 0 \text{ where } \lambda = \pm \sqrt{ab/h}$$
 (3)

The Φ -conic of the two parabolas P_1 , P_2 is concentric with Γ^4 and has A B C for a self polar triangle. Hence by a known result,⁵ if the θ -axes of Γ are conjugate diameters of Φ , then the deviation of A B C is θ ,

Now, a pair of θ -axes of a conic separate harmonically the equiconjugate diameters. Thus, as the equiconjugate diameters of Γ are parallel to the asymptotes of M, the θ -axes in question are parallel to the double lines of the involution pencil determined by the two pairs, namely, the asymptotes of M and the lines through the origin parallel to the asymptotes of Φ . From (1) and (3) it may be easily shown that the required double lines are:

$$ax^3 - by^2 + \frac{a^3b^2}{h^2} (af^2 - bg^2) xy = 0$$
 (4)

- 3. On the quasi-normals, etc., ibid., p. 286.
- 4. Ibid, p. 286.
- 5. On the θ -— normals etc., *Ibid.*, p. 127.

Also, the pair of lines through the origin parallel to the θ -axes of Γ is:

$$ax^2 - by^2 + (a + b) \tan \theta \cdot xy = 0$$
 (5)

comparing (4) and (5) we have

$$\tan \theta = \frac{1}{a+b} \frac{af^2 - bg^2}{3fg - 2ch} \tag{6}$$

To express, then, the value of $\tan \theta$ given in (6) in terms of the invariants of P_1 , P_2 we notice that:

$$\Delta_1 = -\frac{ab}{h^2} \left(f \sqrt{a} - g \sqrt{b} \right)^2, \ \Delta_2 = -\frac{ab}{h^2} \left(f \sqrt{a} + \sqrt{b} \right)^2$$
 (7)

$$\theta_1 = \frac{ab}{h^2} (a^{f^2} + bg^2 - 4abk) - 2 \frac{\sqrt{ab}}{h^2} ab (3fg - 2ch)$$
 (8)

$$\theta_1 = \frac{ab}{h^2} (af^2 + bg^2 - 4abk) + 2 \frac{\sqrt{ab}}{h^2} ab (3fg - 2ch)$$
 (9)

also,
$$J_1 = (a_1 + b_1) = a + b = (a_2 + b_2) = J_2$$
, $C_{12} = (a_1 b_2 + a_2 b_1 - 2b, b_2) = 4b$ (10)

From equations (6) to (10) we get

$$\tan^2\theta = \frac{4 C_{11}}{J_1 \cdot J_2} \frac{\Delta_1 \Delta_2}{(\theta_1 - \theta_2)^2} \tag{11}$$

We may remark that when $J_1=0$ (so that J_2 is also zero) equation (11) gives $\theta=\pi/2$. This is so because in this case the four points form an orthocentre set so that Γ is a circle.

ON NUMBERS ANALOGOUS TO HIGHLY COMPOSITE NUMBERS OF RAMANUJAN

By

S. SIVASANKARANARAYANA PILLAI,

(Travancore University).

Introduction.

In his memoir on Highly composite Numbers,* Ramanujan calls a number highly composite, if the number of divisors of the number is greater than that for any lower number. The origin of this paper lies in the attempt to consider other common arithmetic functions in the light of the above definition. Considering the functions connected with the number of ways of resolving a number into t factors, the sum of the reciprocals of the rth powers of the divisors of a number, and the number of numbers prime to and not exceeding a number, I define three different classes of numbers. Hence this paper consists of three parts.

Considering the technical nature of the subject, here I give only a statement of the main results without any proof. The full paper will be published elsewhere in a mathematical journal.

I. Highly Composite Numbers of tth Order.

If the number of ways of resolving a number into t factors is greater than that for any lower number, then that number may be called a 'highly composite number of t^{th}

order.' That is, N is a highly composite number of t^{th} order, if

$$d_t(\mathbf{N}) > d_t(\mathbf{N}')$$
 for all $\mathbf{N}' < \mathbf{N}$,

where $d_t(n)$ denotes the number of ways of decomposing n into t factors. According to this definition, highly composite numbers of Ramanujan are highly composite numbers of second order.

In the investigation of the properties of these numbers, I closely follow Ramanujan, and it is interesting to note that every result about Ramanujan's highly composite numbers is proved to be true with respect to these numbers, provided that we substitute t instead of 2 in proper places. This requires only a close study of Ramanujan's paper with an eye for generalisation; yet the results are remarkably interesting.

Writing N in the form

$$N=2^{a_2}\cdot 3^{a_2}\cdot \dots \cdot p^{a_p}$$

Where N is a highly composite number of tth order and p is the greatest prime factor of N, I prove the following results:—

- 1. $a_2 \geqslant a_3 \geqslant a_5 \geqslant \ldots \geqslant a_p \geqslant 1$.
- 2. $a_p=1$ for all N except for a finite number of values of N. To be more precise,

 $a_p=1$ whenever either $p>2^{2t}$ or $a_2 \ge t+1$; and $a_p \le \lceil \sqrt{t} \rceil + 1$ when p+2, and $a_p \le \sqrt{t+\frac{1}{4}} + \frac{3}{2}$ when p=2.

3. If
$$\log \lambda = 0$$
 ($\log p$),
 $a_2 \log 2 \sim a_3 \log 3 \sim a_5 \log_5 \sim \dots$

$$\sim a \log^{\lambda} \sim \frac{(t-1)\log p}{\log t}$$

- 4. If $\log \lambda = 0$ ($\log \log p$), $a_{\lambda} \log \lambda = \frac{(t-1)\log p}{\log t} + 0(\sqrt{l_3}p).$
- 5. When N is large, the indices comparatively near the beginning form a strictly decreasing sequence.
- 6. When N is large, groups of equal indices occur comparatively near the end.
- 7. Two consecutive highly composite numbers of t order are asymptotically equal.

It appears that no one has considered the maximum order of $d_t(n)$ when $t \ge 3$. Following the proof given by Wigert for the maximum order of d(n), we can prove a corresponding result for $d_t(n)$. But Ramanujan's method enables us to sharpen this considerably. The maximum order of $\log d_t(N)$ proved to be

, Li
$$(\log N) + 0$$
 $\left\{ \log N \cdot e^{-a\sqrt{(l_2N)}} \right\}$

without any hypothesis, and it is

$$\operatorname{L}i \left(\log N\right) + \frac{\log \frac{1}{2}(t+1)}{\log t} \operatorname{L}i \left\{ \left(\log N\right) \frac{\log \frac{1}{2}(t+1)/\log t}{s} \right\}$$

on Riemann hypothesis.

II. Highly Abundant Numbers.

Let $\sigma_{-r}(n)$ denotes the sum of the reciprocals of the rth powers of the divisors of n; i.e.,

$$\sigma_{-r}(n) = \sum_{\substack{d < r \\ d/n}} d^{-r}$$

Then N may be called a 'highly abundant number of rth order' if $\sigma_{-r}(N) > \sigma_{-r}(N')$ for all N'<N. According to this definition, Ramanujan's highly composite numbers are highly abundant numbers of order zero.

In this paper, I confine my attention to the cases when $r \ge 1$, and use the name 'highly abundant number' only when $r \ge 1$. N denotes a highly abundant number and I write it in the form

$$N=2^{\frac{a}{2}\cdot 3^{\frac{a}{3}}\cdot \dots \cdot p^{\frac{a}{p}}$$

I prove that $a_2 \ge a_3 \ge \ldots \ge a_r \ge$, and $a_r=1$ for all N except for 4 and 36 when r=1, and for 4 when $r\ge 2$. In similarity with highly composite numbers, it is proved that, when N is large, indices near the beginning form a strictly decreasing sequence, and that groups of equal indices occur near the end. When λ is fairly small in comparison with p,

$$a_{\lambda} \log \lambda \sim \log p$$

Further, it is proved that, when a_2 is given, other indices can vary through only three values, and the indices, except a finite number of those near the beginning can be determined with an error of at most unity. But I am not able to show that two successive highly abundant numbers are asymptotically equal.

By comparing the tables for Ramanujan's highly composite numbers and highly abundant numbers of the first order, we see many highly composite numbers which are not highly abundant. Further as far as the tables go, all highly abundant numbers are highly composite. So, for a long time, I was under the impression that every highly abundant number of rth order was necessarily one of lower order.

But now we know that in a highly abundant number, $a_2 \log 2 \sim \log p$, while in a highly composite number of Ramanujam $a_2 \log 2 \sim \log p/\log 2$. Hence, it follows that, after a certain limit, no number will be simultaneously highly composite and highly abundant. This was a real surprise to me. So the above conjecture is not true in general. Yet, the question whether a highly abundant number of the second order is necessarily one of the first order together with all similar questions remains unanswered.

It is interesting to observe that 7560 is the first highly composite number which is not highly abundant, while I wonder whether the first highly abundant number of the first order, which is not highly composite according to Ramanujan, is within the reach of modern computation. Yet it is an intensely interesting problem to determine the number of numbers which are simultaneously highly abundant and highly composite.

Wigert* has proved that the maximum order of $\sigma_{-1}(n)$ is

$$e^{\gamma} \log \log n + 0 (\log \log n)$$
,

^{*}Acta Mathematica Vol. 37 (1914) 114 at sequel.

where γ is Euler's constant. Properties of highly abundant numbers enable us to sharpen the above result considerably. In this paper, it is proved that

- 1. max. $\sigma_{-1}(n) = e^{\gamma} \log \log n + 0$ (1), by elementary methods;
- 2. max. $\sigma_{-1}(n) = e^{\nu} \log \log n + 0\{1/(l2n)^t\}$, for every fixed t by assuming known results about the distribution of prime numbers; and

3. max.
$$\sigma_{-1}(n) = e^{\gamma} \log \log n + 0$$
 { $(\log \log n)^{4} / \sqrt{(\log n)}$ }

on assuming the truth of Riemann hypothesis.

III. Totient Numbers.

As usual, let $\varphi(n)$ denote the number of numbers prime to and not exceeding n. When we attempt to define numbers with respect to $\varphi(n)$ in analogy with highly composite numbers, we get two different classes of numbers.

At first, let us define a class of numbers N such that $\varphi(n) > \varphi(N')$ for all N'<N. Then obviously all primes come under this category. But the problem whether any other number is comprised in this class is really unapproachable; as a matter of fact, it is equivalent to the following conjecture in the theory of primes: namely, there is at least one prime in each of the following intervals (n^2-n, n^2) and (n^2, n^2+n) , where n is an integer. Hence this class of numbers is not interesting and we pass on to the consideration of the other class.

If $\varphi(N) < \varphi(N')$ for all N'>N, then we may call N a totient number. These numbers are really interesting; for they are neither too easy nor too difficult to be investigated.

Let q be the first missing prime if any and P the last prime occurring in N, where N is a totient number. Then I prove that index of P cannot exceed 3, and there are infinitely many totient numbers in which this index is 2. It is highly probable that this index does not exceed two in any case, but I am not able to prove it.

Further, I show that all the primes upto \sqrt{P} should occur; but there are totient numbers in which the gap between the last prime and the last but one contains as many primes as we please. A totient number is not divisible by two primes greater than $(1+\sqrt{2})q$. If a totient number is divisible by any prime greater than 2q, then P < 3q. There are infinitely many totient numbers in which the index of P is 2, but there are as many primes as we please between q and P. While $2 \cdot 3 \cdot 5 \dots P$ is a totient number, there are infinitely many totient numbers in which the indices near the beginning can be chosen as irregularly as we please. Further it is proved that $\log q \sim \log \log N$.

If F(x) denotes the number of totient numbers not exceeding x, then

$$c(\log x^2/\log\log x < F(x) = 0(x^{\epsilon})$$
 for every $\epsilon > 0$.

Two consecutive totient numbers are asymptotically equal. After a certain limit, a totient number can be neither highly composite nor highly abundant. Further it is proved that 2, 6, 12, 60, 120, 240, 840, 1260, 1680, and 720720 are the only numbers which are simultaneously highly composient and totient.

In his Primzahlen, Landau has proved that

min.
$$\varphi(n) \sim e^{-\gamma} n/\log \log n$$
.

At the end of this paper, this result is sharpened. By elementary methods, it is shown that

min.
$$\varphi(n) = e^{-\gamma} n / \log \log n + 0 \left(n / (\log \log n)^2 \right)$$
.

By making use of known results about primes, the minimum of $\varphi(n)$ is proved to be

$$e^{-\lambda}n/l_2n+0(n/(l_2n)^r)$$
, for every fixed r,

Finally, on assuming the truth of Riemann hypothesis, the minimum order of $\varphi(n)$ is sharpened

$$e^{-\gamma}n/l_2n+0\{n(l_2n)^2/\sqrt{\log n}\}.$$

CHARITY AND RELIGION By

DR. S. MUHAMMAD HUSAYN NAINAR, M.A., LL.B., (ALIGĀRH), PH.D. (LOND.) University of Madras.

Charity is one of the main planks of all religions. There is no duty to which more frequent reference is made in the Quran than that of alms-giving. In almost every chapter this duty is urged upon the believers; and in some chapters, indeed, the Prophet returns again and again to this subject. Further, we notice that the duty of alms-giving is usually coupled with that of prayer, upon which also, the Prophet of Islam lays great stress.

IN ISLAM.

Alms are of two kinds in Islam, namely voluntary and legal or obligatory.

Voluntary alms is what one gives from one's property to obtain the favour of God.

- 'Spend out of (the bounties) we have provided for you' is the injunction of the Quran, which asks the believers to give away wealth in charity or employ it in good works. Good works embrace everything that advances the good of one who is in need or promotes the welfare of the community or the nation. Three questions are raised in this connection: what shall one give? to whom shall he give? and how shall he give? The Quran provides an answer in the following verse:
- "Whatever you spend that is good, is for parents and kindred, and orphans, and those in want and for wayfarers. And whatever you do that is good—Allah knows it well." (Ch. II—215).

So 'whatever you do that is good' is charity. It may be money, a helping hand, advice or even a kind word. To fight in the cause of truth is also one of the highest forms of charity.

- "The parable of those who spend their wealth in the way of Allah is that of a grain of corn: it grows seven ears and each ear has a hundred grains. Allah multiplies to whom He pleases." (Ch. II 261).
- "Those who spend their wealth in the cause of Allah and do not follow up their gifts with reminders of their generosity, or with injury—for them their reward is with their Lord." (Ch. II—262).
- "Kind words and forgiveness are better than charity followed by injury....." (Ch. II—263).

The verses of the Quran given above set a very high standard for charity. It must be in the way of Allah, that is, in all charitable deeds love of God should be the motive, so that the feeling of brotherliness may be fostered. The giver of charity must expect no reward in this world (nishkamakarma of Sanskritists) and his charity should not be followed by references and reminders to his act. The kindness and the spirit to overlook other people's faults or short-comings are said to be better than charity if it is spoiled by annoyance or injury to the recipient.

The holy Quran draws distinction between True charity and False charity.

"And the likeness of those who spend their substance seeking to please Allah, and strengthen their

souls, is as a garden high and fertile; heavy rain falls on it but makes it yield a double increase of harvest, and if it receives not heavy rain light moisture suffices it. " (Ch. II—265).

True charity is likened to a garden on an elevated ground. When there is plenty of rain, the water penetrates the soil, yet, its elevated situation keeps it well-drained and the healthy atmosphere increases its yield enormously. But at times, if there be not sufficient rainfall, it catches dew and makes most of any little moisture it can get and that is sufficient for it. Thus a man of true charity gives freely in affluent circumstances without hoarding; in lean times also he does good works without any complaint. He is spiritually healthy; he always looks to God's pleasure, and the strengthening of his soul.

"Cancel not your charity by reminders of your generosity or by injury—like those who spend their substance to be seen of men, but believe neither in Allah nor in the Last Day. They are in Parable like a hard, barren rock, on which is a little soil; on it falls heavy rain, which leaves it just a bare stone. They will be able to do nothing with aught they have earned." (Ch. II—264).

False charity is compared to a hard barren rock, on which a little soil has fallen by chance. Rain water, which made fertile soil flourish, washes away the little soil deposited on the rock and exposes its nakedness. Thus charity 'to be seen of men' is really no charity. It is a false charity, and indicates a disbelief in the Creator.

The Quran enjoins that only good things and wellearned wealth must be given in charity.

"Give of the good things which you have (honourably) earned, and of the fruits which we have produced for you, and do not even aim at getting anything which is bad, in order that out of it you may give away something, when yourselves would not receive it except with closed eyes." (Ch. II—267).

The preceding verse shows that charity has value only if something good and valuable is given, which has been earned honourably and which is produced in nature and can be cited as a bounty of God. So the idea contained in the English proverb "Charity covers a multitude of sins" is not approved in Islam.

"If you disclose acts of charity, even so it is well; but if you conceal them and make them reach those really in need, that is best for you." (Ch. II—271).

Charitable deeds may be done openly or secretly. It is better not to seek publicity, but if it is for public purposes, it must necessarily be known provided the chief motives in charity—God's pleasure and our own spiritual good—are kept in view.

Indiscriminate acts of charity are condemned in the following verse of the Quran:

"Charity is for those in need, who, in Allah's cause are restricted from travel and cannot move about in the land, seeking for trade or work. The ignorant man thinks, because of their modesty, that they are free from want. Thou shalt know them by their unfailing mark. They beg not importunately from all and sundry." (Ch. II—273).

The real beneficiaries of charity indicated in the above verse are those in want, and the want must be due to honourable cause. 'God's cause' may be defined as sincere and real service to humanity, and devotion to one's religion. Such men may not go about from door to door. It is the duty of the rich to find them out, and help them liberally.

LEGAL OR OBLIGATORY CHARITY.

The Quran lays great emphasis on the service to humanity and amelioration of the condition of the poor. It teaches that every wealthy man who belongs to the commonwealth of Islam should contribute annually one-fortieth of his wealth to a common fund which is managed by the state, or where there is no state, by the Muslim community, for the betterment of the poor. This contribution by the Muslims is called Zakat. The institution of Zakat in Islam acts not only as a levelling influence, but it promotes sentiments of love and sympathy for fellow-beings.

By means of this institution wealth is made to circulate in the body politic of Islam. A portion of the wealth collected regularly from richer members is pooled at the centre and then distributed among the poor and deserving people for their uplift. This practice used to solve the distribution of wealth, which is the main concern of the present day economists. Wealth has the tendency to accumulate and bring about inequalities of capitalism. The Zakat aims at partail redistribution of wealth so that the whole community may derive benefit out of such distribution. The Quran and Traditions lay down the items of expenditure of this Zakat money.

Islam has a broader conception of charity apart from its sense of giving away one's wealth. The Quran attaches great importance to such deeds of charity as the emancipation of slaves, the feeding of the poor, taking care of orphans, and doing good to humanity.

The Traditions of the Prophet give various examples of charitable deeds such as the removal from a road anything which may cause injury, helping a man to ride his animal, or load his animal, to show the way, to say a good word, and refrain from doing evil to any one and so on.

IN HINDUISM.

One of the objects of charity in Hinduism appears to be the warding off of ills and difficulties that may happen to an individual or a state. It is believed that charity prevents difficulties and is regarded to be very auspicious and sacred. According to the Matsya, Purana¹ there are 16 mahadanas which were performed by great kings like Krishna, Ambarisa, Prahlada, Prthus and Bharata.

The sixteen mahadanas are:—

- 1. Tula purusa dana—or a gift equal to the weight of a man in gold. This is said to be the first and best of all gifts.
- 2. Hiranyagarbha dana—a gift of a golden vessel called hemagarbha.
- 3. Brahmanda dana or a mundane egg to be made and worshipped on an auspicious day and given away as gift.

¹ See V. R. R. Dikshitar, The Matsya Purana—A Study. University of Madras (1935) pp. 95-100.

- 4. Kalpapadapa dana—a gift of a tree of paradise. This is said to be equal in merit to the Asvamedha sacrifice.
- 5. Gosahasraka dana—a gift of thousand cows.
- 6. Hiranya Kamadhenu dana a gift of a celestial cow of gold.
- 7. Hiranyasvadana—or a gift of a horse of gold.

 This is said to confer numberless benefits on the devotee.
- 8. Hiranyasvaratha dana—a gift of a horse chariot of gold. The giver is said to attain beatitude after being freed from all sins.
- 9. Hemahastiratha dana—a gift of an elephant car of gold.
- 10. Panca langalabhu dana—a gift of a plot of land measuring five ploughs.
- 11. Dhara dana—a gift of an earth of gold in imitation of Jambudvipa.
- 12. Visvacakra dana—a gift of a wheel of the universe weighing from 1000 palas of gold to 20 palas according to the ability of the devotee.
- 13. Maha Kalpalata dana—a gift of a creeper of paradise. Here the worship of devis and of Lokapalas is inculcated.
- 14. Saptasagaraka dana—or a gift of the seven oceans. The ceremonies are performed in seven sacrificial pits filled with honey, butter-milk, etc., representing the oceans respectively.

- 15. Ratnadhenu dana—a gift of a jewelled cow.
- 16. Mahabhutaghata dana—a gift of a pot containing the five elements.

These Danas were performed by Hindu kings till a very late period of Indian History. We have the valuable testimony of Epigraphy to show that the kings of Vijayanagar performed these mahadanas at different centres of pilgrimage and thus endeared themselves to peoples and gods. Even to-day some of these Danas are given in Hindu states like Travancore.

The Hindu Law Books insist that gifts should be given to sishtas or men of learning and exemplary character who hand on the torch of learning. Annadana or feeding the poor and the deserving is considered to be the best kind of charity and therefore a number of choultries and chatrams are established by philanthrophists in all ages. Besides almsgiving there are other kinds of gifts like the erecting of new shrines and renovating of old temples and endowing large estates with permanent income for promotion of learning.

If we turn to Tamil literature, the *Tirukkural*, a Tamil classic, lays stress upon almsgiving in many couplets:

- "What you spend in alms to the indigent is worthy.
- Otherwise it cannot be without taint of some purpose."
- "The giver will not feel delighted, till he sees the face of the suppliant lit up with satisfaction."

"Men of noble birth give alms to those who seek it without waiting for their poverty-stricken language."

IN OLD AND NEW TESTAMENTS.

Frequent references are made to the matter of almsgiving both in the Old and New Testaments as well as in Talmudic writings.

Lev. 19, 9 f:—" And when ye reap the harvest of your land, thou shalt not wholly reap the corners of thy field, neither shalt thou gather the gleanings of the harvest. (10) And thou shalt not glean thy vineyard, neither shalt thou gather the fallen fruit of the vineyard; thou shalt leave them for the poor, and the stranger; I am the Lord your God."

Deut. 14, 28f:—" At the end of every three years thou shalt bring forth all the tithe of thine increase in the same year, and shalt lay it up within thy gates: (29) and the Levite, because he hath no portion nor inheritance with thee, which are within thy gates, shall come, and shall eat and be satisfied; that the Lord thy God may bless thee in all the work of thine hand which thou doest."

In the Talmud the greatest stress is laid upon this duty. Here, as in the Quran, it is again and again referred to. The following passages may be taken as examples:

P. Aboth 5: "There are four kinds of almsgivers, namely, those who are willing to give, but are not willing that others should give; whose eyes are envious of the goods of others. He who wishes that others give, but that he himself should not give; whose

eyes are envious of his own goods. He who gives himself and also allows others to give; he is pious. He who will neither give himself, nor yet allow others to give; he is wicked.

Snh 49 b. "Alms is more meritorious than all sacrifices."

- B. Bathra 10b: "So great is alms-giving that it reaches even to redemption."
- "As the sin-offering of Isreal made expiation, so doth alms make expiation for the people."
- Ber. 6 b. "Three things destroy evil fate, namely, prayer, alms and repentance."
- "What are meritorious with fasting are the alms which a man gives in the evening to the poor, that they may procure provisions."

Noteworthy also are the following sayings in the Talmud:

"Alms is the salt of wealth. When wealth is salted with this, it keepeth, just as meat is kept from destruction with salt."

Compare Christ's teaching in Luke 11, 41:

"But rather give alms of such things as you have; and behold, all things are clean unto you." Here Christ enjoins alms as the true means of purifying material objects for our use.

The giving of alms in secret is greater according to the teaching of Moses. It is said of Rabbi Janay, that seeing a man bestowing alms in a public place he said, "Thou hadst better not have given at all, than to have bestowed alms so openly, and put the poor man to shame."

Rabbi Jochanan taught that he who is active in kindnesses towards his fellows is forgiven his sin.

Christ also like the Prophet of Islam believed in the value of giving alms in secret. Christ says in Matt. 6, I:—

"Take heed that you do not give your alms before men, to be seen of them; otherwise, you have no reward of your Father which is in heaven."

Thus the greatest value is attached to the practice of almsgiving not only by Islam but by all other religions. The prominence given to this matter shows us in what light almsgiving was regarded among all the great founders of various religions.

MODERN VIEWS ON THE STRUCTURE OF METALS1

By

Prof. K. S. Krishnan, F.R.S.

CALCUTTA.

There are several striking properties that distinguish a metal from a non-metal. A metal is a good conductor of both heat and electricity; indeed in popular descriptions of electrical phenomena the term metal is used almost as a synonym for a good conductor. We speak of metallic reflection or metallic lustre, and also of a metallic sound or the ring of a metal, and figuratively of a metallic voice. We speak also of the malleability of a metal. What is it that endows metals with these characteristic properties? The first step towards an answer to this question was the recognition, made about the end of the last century, that these various properties characteristic of a metal are intimately connected with one another, and further that they can all be traced ultimately to the presence in the metal, of a large number of free electrons, i.e., electrons that can migrate freely over the whole body of the metal.

The mobility of these electrons accounts directly for the observed electrical conductivity of the metal, and also for its thermal conductivity. The optical behaviour of such a medium containing free electrons will be similar to the behaviour of the ionosphere with regard to wireless waves. As we know, the ionosphere, containing a

¹ Some parts of this paper are based on a speech broadcast from the All India Radio Station, Dacca.

fair number of charged particles, almost totally reflects all wireless waves whose wave-lengths are greater than a certain critical value. The facility with which wireless waves are propagated over the earth—indeed several times round it under favourable conditions—is due to the reflecting properties of the ionosphere. In the same manner a metal, with its large density of free electrons, has its critical wave-length in the ultra-violet region of the spectrum, and electromagnetic waves of longer wavelengths, as for example light-waves, will therefore be totally reflected from the polished surface of the metal. This accounts for the peculiar sheen or lustre that is associated with a metal. The solid metal, which is crystalline, may be regarded as an assemblage of positive ions arranged in a regular manner, and embedded in a matrix of negatively charged free electrons, and this structure will account for the malleability of the metal, and also for its peculiar elastic properties.

The number of such free electrons is easily estimated, at least in some of the simple metals like the alkali metals. Thin films of these metals have been found to become transparent, as should be expected, beyond a certain critical wave-length in the ultra-violet, which is different for the different alkali metals. From these wave-lengths one can calculate the number of free electrons in these metals in the same manner in which one can calculate, from the critical wave-length of penetration of wireless waves into the ionosphere, the density of charged particles in it. The number of free electrons in the alkali metals, thus estimated, comes out to be nearly one per atom, which, in view of the monovalency of these atoms, seems to be very reasonable.

With this estimate of the number of free electrons, one would naturally like to go further, and deduce quantitatively from a few simple postulates regarding the movements of these electrons, the various metallic properties. An obvious, and particularly simple, set of postulates would be to suppose that these electrons are moving about in a random, disorderly manner, much like the molecules in any ordinary gas. Then, the larger the temperature the greater will be the velocities and therefore the kinetic energies of these electrons. This picture, however, presents some fundamental difficulties. first place, measurements on the heat capacities of metals show that even with a large increase in temperature there is hardly any change in the kinetic energies associated with the electrons—a result which flatly contradicts the theoretical prediction.

Secondly, each of these electrons, by virtue of its spin, should behave like a small magnet, of a definite known strength. When a piece of any metal, like copper or silver—I shall exclude for the present the ferrous metals, which have a complicated magnetic behaviour is placed between the poles of a magnet, the elementary electronic magnets in the metal will naturally tend to aline themselves along the direction of the magnetic field. This tendency to regular alinement will, however, be much hampered by the disorderly thermal movements of these magnets. When equilibrium is established, there will be, statistically, a preponderance of orientations along the field, as compared with orientations in other directions; with the result that the piece of metal will behave like an induced magnet. Now the lower the temperature, the less violent will be the thermal movements, and consequently the feebler the disturbances to

the regular alinement of the elementary magnets, and therefore the greater the magnetization of the piece of metal.

But actually the magnetization produced at all ordinary temperatures is found to be only one hundredth of the expected value, and further even this feeble magnetization, instead of being stronger at lower temperatures, remains practically independent of temperature.

From the low values for the specific heat and the magnetization of the free electrons in the metal, one may be tempted to infer that the number of these free electrons may not be really so large as that deduced from the optical data, but may be much smaller, only a hundredth of it. This alternative also presents a serious difficulty. The observed conduction properties of the metal will then require that the free electron must be capable of travelling enormous distances in the metal without suffering any collision—distances about a hundred times the distance between neighbouring atoms in the metal. How an electron can travel in a straight line such large distances, and still dodge all the intervening atoms, which are fairly closely packed, and avoid colliding with them, is on this view incomprehensible.

The above considerations relating to the specific heat, magnetization, and distances of travel of the electrons in a metal, will illustrate the kinds of difficulties that one meets with in trying to develop a simple kinetic theory.

On a closer examination of the problem, however, the failure of the simple theory is not surprising. With the large concentration of free electrons that ordinarily obtains in a metal—nearly as large as the concentration of the atoms—and their low mass, the wave-aspect of the electrons will become very conspicuous, and we have to replace the ordinary kinetic postulates appropriate to an aggregate of particles, by suitable postulates that will take into account the wave-nature of these electrons.

The fundamental law governing wave-motions in an enclosure is very simple. Let me illustrate by some examples. It is well-known that if a stretched string is allowed to vibrate, those vibrations only will be maintained whose half-wave-lengths are equal to the length of the string, or half, or a third, or a fourth, etc., of the length. In other words, only those vibrations that form nodes at the two fixed ends of the string, will be maintained.

In the same manner, if we consider the vibrations of the air in a closed room, there are certain discrete notes which only can be maintained in the enclosure, as any one who sings in a small room will realize. By sounding various notes it is easy to locate some of these natural frequencies of vibration of the air in the room. According to Lord Rayleigh it is somewhat in this manner that blind people are able to guess about the sizes of rooms.¹

Now the result that in any given enclosure certain discrete wave-lengths only can be maintained, is very general, and applicable not only to the sound-waves

¹ He quotes a remarkable instance recorded by Darwin. 'The late blind justice Mr. Fielding' writes Darwin 'walked for the first time into my room when he once visited me, and after speaking a few words said "This room is about 22 feet long, 18 wide and 12 high"; all of which he guessed by the ear with great accuracy'.

maintained in the air inside a closed chamber, but also to light-waves, or electron-waves, maintained in suitable enclosures.

An obvious question suggests itself at this stage. We found just now that only waves of certain discrete wave-lengths, depending on the size of the enclosure, can be maintained in it. Will all these waves be maintained in equal intensity, or will some of the waves be more intense than others? In other words, how is the energy distributed among the different permitted vibrations?

In the example of the sound-waves in an enclosure the answer is simple; the gravest notes will be the predominant notes. The corresponding problem in the case of light-waves is rather complicated, and has indeed proved to be a major problem in physics. With electronwaves the problem becomes again simple. Each of the permitted wave-lengths for the electron-waves in the medium, as for other waves, will correspond to a definite kinetic energy, so that the law regarding the maintenance of waves of definite wave-lengths, will mean that the kinetic energies of the electrons in the metal can have certain discrete values only. There is a subtle principle of exclusion governing these electrons according to which, in the whole assemblage, containing billions of billions of electrons, just two electrons, and no others, can have any particular permitted kinetic energy. These two may be regarded as a pair moving along opposite directions with the same kinetic energy, and with their spins opposed to each other.

¹ The above statement of the Principle of Exclusion may be shown to be ultimately equivalent to the statement that no two electrons in the metal, having their spins parallel, can occupy the same position at the same time.

Now assigning one such pair of electrons to the gravest mode of vibration, *i.e.*, to the lowest permitted level of kinetic energy, another pair to the next higher permitted energy level, and so on, one finds that the last pair of electrons in the metal has to be assigned on this scheme to an energy level that is enormously high. To give an idea of the magnitude of the highest energy possessed by the electrons, I may mention that in a metal like silver, the energy will be the same as the average energy of the molecule in any ordinary gas kept at a temperature of about 40,000°C. The corresponding velocity of the electron will be nearly 1|250 of the velocity of light, *i.e.*, nearly 750 miles per second, which is a very high velocity indeed.

Thus all the permitted energy levels up to a certain large value will be occupied by electrons in pairs. A few stray electrons may occupy some of the immediately higher energy levels, and singly; their number being the smaller the lower the temperature. At room temperature their number will be about one per cent.

The enormous energies possessed by the free electrons in the metal will therefore persist practically unimpaired right down to the lowest temperatures.

The above model of the electronic structure obtaining in metals offers a satisfactory solution of the difficulties encountered before. In one first place, since the average kinetic energy already possessed by the electrons is at least a hundred times greater than the thermal energies possessed by molecules at ordinary temperatures, naturally until we reach temperatures of the order of a few thousand degrees, we cannot appreciably add to their energy content.

Secondly, the majority of the electrons are paired in such a way that the spin magnetic moments of the components of a pair oppose each other. In the presence of a magnetic field it is only the few stray electrons (about one per cent at room temperature) that are unpaired, that can turn round in the magnetic field and contribute to the magnetization. It is therefore not surprising that the observed magnetization is so feeble.

Now the number of such single or celibate electrons will be the smaller the lower the temperature. On the other hand, the lower the temperature the less the disturbance from thermal agitations to the regular alinement of these magnets and hence the greater the magnetization. As a result of these two opposing factors, the first tending to decrease the number of effective magnets at low temperatures, and the second tending to improve their alinement at low temperatures, the observed feeble magnetization will be practically independent of temperature.

On this view, the number of free electrons that can take part in electrical conduction will in effect be small. We then have to meet the third difficulty that I mentioned, namely that observational data require that the electron should be capable of travelling large distances, without colliding with any of the numerous atoms in its path. The difficulty resolves itself in view of the wave nature of the electron which predominates under the conditions of close packing in the metal. When the wave-length is large in comparison with the inter-atomic distance, electron-waves, just like light-waves, will suffer very little loss of energy by passage through a homogeneous medium in which the constituent atoms, which will tend to scatter the waves, are regularly spaced as in

the crystalline metal. If the atoms are perfectly regularly arranged, the scattering of the electron-waves by them will be so small that the metal will have hardly any electrical resistance. Thus on this view the difficulty is not so much to explain how the electrons travel large distances in the medium, but to explain why they stop at all, i.e., why the metal has any electrical resistance at all. To explain this we have to invoke the deviations from the regular arrangement of the atoms, brought about by their thermal agitations; the higher the temperature, the larger will be the deviations, and hence the greater the scattering, and therefore the greater the electrical resistance of the medium. This is one of the characteristics of pure metals. The presence of any impurity, will naturally disturb the homogeneity of the scattering medium, and will thus tend to increase its resistance. This result also is experimentally verified.

Thus all the three difficulties mentioned in an earlier part of this paper as typical of those that one encounters in the classical electron theory of metals, vanish when the wave nature of the mobile electrons is taken into account. If further one can, on this basis, explain what can not be explained on the classical theory, namely, why certain elements only are metallic and not the others, the new theory may be regarded as quite satisfactory.

The question raised above may be restated in the following form: why is the free electron density so large in certain elements and not in others? If we might generalize from the results obtained for the alkali metals, we should expect the number of free electrons to be the same as the number of valency electrons. Why then are not all the elements metallic?

We have already seen that electron-waves with certain definite wave-lengths only can be maintained in a given enclosure and that among these permitted wavelengths, all those that range from the longest to a certain minimum, which is determined by the density of free electrons in the enclosure, will be represented in the motions of these electrons at ordinary temperature. Assuming that all the valency electrons in a crystal are free, let us calculate this minimum wave-length. If this wave-length—to be more precise, half of it—comes out to be much greater than the distance between neighbouring atoms in the crystal, then evidently the influence of the crystal lattice on the electronic motions will be small, and the electronic behaviour will conform to that of an electron gas. The substance will then exhibit pronounced metallic properties. This is the case with the alkali metals, and the noble metals.

If, on the other hand, the minimum wave-length calculated from the electron density is not so large, the possibility of regular reflections from the crystal planes, of some of the short waves, has to be considered; in other words, the influence of the lattice becomes prominent. In the neighbourhood of those wave-lengths that can be reflected strongly, are set up barriers that require much energy to cross over from the long wave-length side.

If, as frequently happens, the permitted wavelengths on the long wave-length side of the barriers are just sufficient in number to be assigned one to each pair of electrons in the substance, then these electrons are as good as bound. They cannot change their wavelengths, or their momenta, except by crossing the barriers, i.e., except when supplied with the requisite

large energy from outside. Such substances will not conduct electricity, except in very high electric fields. In other words, they will behave as insulators. Diamond is a typical example of such a substance. The number of electrons to which can be assigned proper wavelengths, without crossing the barriers, comes out in this crystal to be just four per carbon atom, *i.e.*, just all the valency electrons; and the barriers are sufficiently high to prevent a normal crossing over of the electrons.

Thus the new theory provides us further with a criterion by which to decide whether the valency electrons in a given substance can be regarded as free, or as effectively bound, *i.e.*, whether the substance will behave as a metal or as an insulator.

KUBERA

By

G. V. K. AIYANGAR, M.A.

Kubera or Kuvera is one of the gods of Hindu mythology. His counterpart is found in the mythologies of most of the countries of Asia and even goes by the same name in some of them. He ranks below the principal gods and is a sort of guardian of the world and defender of the faith.

In Vedic mythology Kubera figures as the regent of the spirits of the lower regions and of darkness, as the Indian Pluton.

There are various references to Kubera in the Ramayana. 'Accounts of the origin of Kubera, as found in the epics and the puranas, differ. The story as given in the Uttarakanda of the Ramayana is; "Brahma had a mental son named Pulastya. Pulastya had a son named Visravas by the daughter of Trinavindu. Visravas, becoming a sage, married a daughter of Bharadwaja, Idavida, whose son Brahma named Vaisravana, Kubera. He performed austerities for thousands of years and received as a boon from Brahma that he should be the god of riches and one of the guardians of the world. At the suggestion of his father Visravas he took possession of Lanka for his abode, which was formerly built by Viswakarma for the Rakshasas who through fear of Vishnu had forsaken it.'

The Mahabharata makes Kubera the son of Pulastya and not his grandson. According to it, "Brahma had a mental son named Pulastya, who again had a mental son named Gaviputra Vaisravana or Kubera. The latter

deserted his father, and went to Brahma who, as a reward, made him immortal and appointed him to be the god of riches with Lanka for his capital, the car Pushpaka for his vehicle which moved at its owner's will at a marvellous speed. Pulastya being incensed at this desertion of his son Kubera reproduced the half of himself in the form of Vaisravas who looked upon Vaisravana with indignation. The latter strove to pacify his father and with this view gave him three elegant Rakshasis to attend on him. They bore him Ravana, Kumbhakarna, Vibishana, Kara and Surpanakha. These sons were all valiant, skilled in the Vedas and observers of religious rites but perceiving the prosperity of Vaisravana were filled with jealousy. The brothers began to practice penance to propitiate Brahma who gave them the well-known boons. One of the acts of Ravana's tyranny was to turn Kubera out of Lanka and take Pushpaka by force from Kubera. Kubera retired to Gandamadhana. The Pushpaka was returned to him by Rama after Ravana's death.

Another account of the origin of Kubera is to be found in the Varahapurana. When Brahma entertained the desire to create a universe a shower of lime-stones began to pour forth from his face attended with high winds. After some time when the fury of the storm broke down and everything became calm by the wish of Brahma, he asked the mass of stones to assume the form of a divine person of peaceful countenance and appointed him as the lord of wealth and commanded him also to be the guardian of the riches of the Gods. Kubera is also said to be one of the emanations of Siva with his abode at Alakapuri on the Mount Kailasa.

Besides being the lord of riches and the guardian of the north, he is considered to be the king of the Yakshas, Guhyakas and Kinnaras and is represented as being carried in his car or on the heads of men. Throughout the Ramayana there are brief references to Kubera as the giver of riches and also to the beauty of his palace and gardens. The Bhagavata Purana describes his garden as a place "where the inhabitants enjoy a natural perfection, attended with complete happiness obtained without exertion. There is there no change resulting from the four Yugas; no distinction of virtue and vice; there is neither hunger, weariness, anxiety, grief, fear nor death. The people live in perfect health free from every suffering for ten or twelve thousand years.

His consort is Kauveri or Yakshi or Charvi, daughter of Dhanava Mura. His sons were Manigriva or Varnakavi and Nalakubara or Mayuraja and his daughter Minakshi. The sons were cursed by Narada to become trees in which condition they remained until Krishna an infant uprooted them.

The corporeal form of a king is composed, says Manu, of particles from the eight guardians of the world, of whom Kubera is one. The king therefore surpasses all mortals in glory and is the genius of wealth.

The agamas also recognise Kubera as the master of the Yakshas. According to one authority his colour should be golden yellow and crimson according to another. The colour of his dhoti is to be red and the uttariya white. His person should be adorned with all ornaments including a Kirita, Kundala and necklaces' composed of a series of golden coins. He should be good looking or even terrific looking and possessing either two or four arms. If the arms are only two the hands may be kept in the varada and abhaya poses or the left hand may keep in it a gada; if he has four arms, two of them should be one each round his consorts Vibhava and Vriddhi seated on his left and right laps, the remaining hands should carry the gada and sakti. His left eye should be of yellowish brown colour and he should be dressed in the fashion of westerners. He should have a Kavacha, a pair of moustaches and side-tusks. He should have a rather podgy form, in the "I sold for cash" style. He may be seated on a padmapita or be driven in a chariot drawn by men or even directly seated on the shoulders of a man.

To the right and left of Kubera there should be the Sankanidhi and Padmanidhi who should resemble the Bhutas. He should be surrounded by the eight kinds of wealth and by a number of Yakshas. One of the agamas states that the ram is the vehicle of Kubera but the Rupamandana prescribes the elephant as his vahana. It states that his four hands should carry the gada, a purse containing money, a pomegranate fruit and a Kamandalu. It also states that the figure of Kubera should be to the west of the image of Ganesa in any temple dedicated to Ganesa.

Kubera in the form of an idol has no temple and no Agamic worship; but he is worshipped in the home as part of Vedic ritual on certain occasions. The Taitareya Aranyaka (I, 31) prescribes the procedure in detail for the Vaisravana Yagna. In the elaborate ritual during a Shashtiabdhapurthi, Kubera is one of the chief gods to be propitiated. He is invoked in a poornakumbha

placed to the north of the main Kalasa in the following words:—Naravahana, Lord of the Yakshas and of all holy men, O God, being invoked by me, make this my puja fruitful.

Kubera belongs as much to Buddhism as to Hinduism. In the Buddhist literature and mythology also he is the god of riches and the guardian deity of the northern region of the universe. He is also the chief of the Yakshas, good or evil genii. He is the husband of Hariti, a Yakshini, and herself a giver of wealth. His other forms are Vaisravana and Jambhala. In the Buddhist mythology Kubera is sculptured exactly as in the Hindu representation; but he is immediately recognised by a mongoose which is generally also shown either as sitting upon his left lap or placed on his left In the bas-reliefs of Chandi-Mendut there is a representation of Kubera surrounded by Yaksha children and alongside a scene the central personage of which is the child-devouring Hariti, who being converted became the beneficent goddess of health and abundance.

In the mythology of Lamaism Kubera is one of the eight terrible divinities. Kubera or Vaisravana (in Thibetan Ruam-thos-ras) belongs to the group of genii who are the guardians of the points of the compass. He is the god of riches; his emblem is a banner and his attribute a mongoose vomiting pearls. He is the guardian of the North.

The Indo-Chinese have eight Lokapalas (lukabalas) who watch over the earth and its inhabitants. The kingdom of the North is under the ward of Kovero or Peysrap (Kuvera or Vaisravana). His subjects are the Yeaks clad in gold.

Kuvera is also popular with the Javanese. He is one of the minor gods of their pantheon and is the god of riches. He is represented as an obese figure and his most frequent attributes are the mongoose and the lemon.

In Japan Kuvera goes by the name of Kompira or Kubiri. He is a fairly popular deity. One story is that he was originally a demon, converted to Buddhism and he became a god of happiness. Another makes him one of the twelve generals who were protectors of Buddhism. Others make him one of the twenty-eight nakshatra deities. Kompira is regarded as a patron god of sailors and a god of prosperity. The images represent him as a big-bellied man sitting cross-legged. He is ugly, his skin is black and he holds a purse.

In Tamil literature also Kubera is the god of wealth, lord of the Yakshas, regent of the north and one of the Ashtadikpalas. But it is only in Tamil literature that the word also connotes a very rich person.

SEATS OF LEARNING AND THEIR PATRONS IN ANCIENT INDIA

By

Dr. C. Kunhan Raja.

University of Madras.

On this auspicious occassion of the celebration of the sixtieth birthday of Raja Sir Annamalai Chettiyar of Chettinad, the greatest patron of learning in Modern Times in South India, my thought naturally wanders into Sanskrit Literature in search of similar benefactors who have helped learning in ancient times, and finds solace to feel that the tradition of ancient India is being kept up unbroken even in modern times. ordinary modern Indian, the name of Raja Sir Annamalai Chettiyar appears in association with the names of various persons who have endowed Universities in the West and their minds move spacially. But since I am a Sanskritist, my mind takes to the time-axis and associates the name with similar patrons who have helped in the development and preservation of culture in our own India in ancient times.

Even in the most ancient specimen of Sanskrit Literature, namely the Rigveda, we come across references to the patronage of learning with munificent gifts. The Rigveda contains a little over a thousand hymns with an average of ten verses, mostly in the form of praises addressed to the various gods. But right from the beginning to the end, we come across verses in praise of the patrons of learning also, interspersed with praise addressed to the gods. In most of the cases, such praises addressed to the patrons of learning come at the

beginning or end of hymns addressed to the gods. Sometimes, these praises addressed to the patrons of learning form separate hymns.

The kings of yore, who were symbols of the State, considered it one of their most sacred duties to see that such persons who engaged themselves in the advancement of learning and its propogations received adequate aid from the State. No learned man left the portals of a royal residence in disappointment if his mission in the visit was to receive such State-aid for higher educa-The Rishis of Ancient India devoted themselves to probing into the mysteries of the world, in finding out the Truth in the world and in communicating such Truth to their disciples. They were interested in the day to day affairs of the world as well, and they were in frequent communication with the State as symbolised by the King. It is not right to say that their endeavour was only to find out the abstract metaphysical Truth of the Universe divested of all practical importance. Although they attached great importance to the problem of metaphysical Truth, they knew that there was a lifeaspect in the Universe, and whenever there were calamities in the world like draught, flood, famine, pestilence and war, they were on the side of the Kings to advise them about the remedy. There are constant references in Sanskrit Literature to show that the Rishis associated themselves with the practical affairs of the State, that they tendered their mature advice on all matters of State and that the Kings sought such advice and listened to them. I need not dilate on the matter much further.

The Kings knew that although in matters of day to day administration, the regular civil and military

officers of the State may be depended on to carry on the work, in special circumstances the State needs the advice of thinkers who are not involved in the complications and details of administration and who can take a detached and impersonal view of things. It is this close association of the State with the higher thoughts of the few in ancient India that gave the stability to the State. And these Rishis were nothing more than what in modern terminology can be called University men.

The Rishis spent their times in the Asramas, persuing their intellectual vocations, advancing and propogating learning. The Rishis cannot maintain the Asramas, the ancient counterpart of modern Universities, without money and such money they got from Kings and also from wealthy men. It is in acknowledgment of such contributions from Kings and wealthy men that the Rishis sang in praise of such gifts. Such praises as appear in the Rigveda are called the Danastutis (praises of gifts). Perhaps all such Danastutis collected together will have the appearance of a modern Commemoration Volume. Such commemoratory volumes are not modern inventions. We have many such commemoratory volumes in Samskrit Literature, right from the Rigveda to very recent centuries. Kavindrachandrodaya, contributed by the scholars of the seventeenth century as a token of their gratitude to Kavindracharya, a great Samnyasin at the time of Shah Jahan, for having interceded with the Emperor and saved them from the pilgrim Tax at Allahabad is one of the latest specimens of such Commemoratory Volumes in Sanskrit Literature. Nrisimhasarvasva, dedicated to a great Samnyasin named Nrisimha of Benares is another.

The Danastutis in the Rigveda have not been collected and presented as a separate work. They remain scattered in the vast literature called the Rigveda. The praises offered by the various Rishis to the various Kings and patrons remain in their positions within the contributions of the separate Rishis in the Rigveda Collection. We know who the Rishis were who have addressed such praises to the Kings and to the other patrons and we know also who the Kings and other patrons were who helped the Rishis in maintaining the Asramas. Thus the entire hymn 126 in Mandala I is addressed by Kakshivan to Bhavayavya. Perhaps it may not be out of place here to give some specimens of such praises.

With Wisdom I present these lively praises to Bhavya the dweller on the banks of the Sindhu,

For he, unconquered king, desiring glory, hath furnished me a thousand sacrifices.

A hundred necklets from the King, beseaching, a hundred gift-steeds, I at once accepted,

Of the lord's cows a thousand, I Kakshivan. His deathless glory hath he spread to heaven.

The Rishi Vamadeva has addressed similar praise to King Somaka, son of Sahadeva. Babhru of the Atri family praises the King Rinamchaya. Similarly Syavasva of the same Atri Family praises Sasiyasi, Purumidha, Taranta and Rathaviti. The first of these four is a woman and as such is of special interest. I quote a few lines from the praises addressed to this woman patron of learning.

Yea, many a woman is more firm and better than the man who turns

Away from gods and offers not.

She who discerns the weak and the worn-out the man who thirts and is in want:

She sets her mind upon the gods.

Similarly various Rishis like Bharadvaja and Vasistha have addressed praises to their respective patrons. The largest number of such praises comes from the Rishis of the Kanva family, whose hymns are collected in the eigth Book of the Rigveda.

When we come to the Upanishads there are various stories narrated there about Kings offering gold to the Rishis. The entire Dharma Sastra Literature is full of praises about offering gifts of gold and other forms of wealth to Brahmins in expiation of sins. No religious rite is complete unless there is the offering of money to the Brahmin who officiated at the rite.

When a student finished his education at such Asramas, they usually gave some Dakshina to the Teacher. This shows that no fee was collected at these institutions and it was at the option of the student to contribute something to the Institution at the end of his education. This may at best correspond to the Convocation fee or the fee for the registration as graduate in the modern Universities.

The story that Kalidasa narrates in the fifth canto of his Raghuvamsa is typical of this system. A boy of the Kutsa family finished his education at the Asrama of Varatantu and at the end the student insisted on the teacher accepting a fee, though the teacher at first declined. Then when the student persisted, the teacher demanded 14 crores as the fee and the student approached the King Raghu for help in such a plight. The great king said that he had his treasury completely depleted on account of a sacrifice which he had performed, in which all his worldly possessions he had to offer as Dakshina to the Brahmins but assured the student:

"A young man who had crossed to the other shore of wisdom seeking the necessary money to pay his fee to the teacher did not have his desires fulfilled by Raghu and had to go over to another patron for the money—such a new disgrace shall not alight on me."

There is another interesting story which throws some light on the mentality of the ancient Rishis. King Parikshit was under a curse that he would be bitten by the serpent Takshaka. The great Rishi Kasyapa was going to the Palace of the King to save him. Then on the way he met Takshaka himself. They recognised each other and they wanted to know who was stronger. Takshaka bit a banyan tree and the tree was turned into ashes. Kasyapa threw some water with Mantras and the tree was restored to its original state. Takshaka knew that if he killed the king, the Rishi would save him and bring him back to life. So Takshaka asked the Rishi why he wanted to stand in the way of the operation of fate. The Rishi replied that if he saved the King's life, he would receive wealth for his Asrama. Takshaka. offered wealth to the Rishi and the latter quietly retired, leaving the king to his fate of being killed by Takshaka's bite.

The Rishis had to keep up a great establishment in the form Universities and for this they wanted money. The money had to come from the State and also from private benefactions. They received immense patronage both from the Kings, who symbolised the State and also from rich people. Out of such benefactions, the great Asramas were maintained, where the students received free education, free in its widest application.

The Asramas were not mere narrow theological or metaphysical institutions, where the Rishis thought about only the absolute values of things, about the Infinite, the Eternal in the Universe, regardless of the practical values of things. Nor were the Asramas very far removed from the cities and completely detached from the common life in towns and villages. The Rishis themselves knew all about the practical aspects of things in life and advised the kings on such matters. In the Mahabharata, just prior to the Rajasuya, Narada went to the Palace of King Yushisthira and made inquiries about the welfare of the citizens in the empire. He did not go there to engage the King in a metaphysical or theological disputation, nor to impress the king with his abstract erudition devoid of practical values. When there was a possibility of a civil war consequent on Duryodhana snatching away the kingdom of Yushisthira by treachery, all the sages went to both the parties to avert such a calamity, by trying console one in his loss and by trying to persuade the other to return the illegitimate acquisition. When there was misery in the country, the Rishis went to Sri Rama to represent matters to him and to find a remedy.

Even ordinary Samskrit Literature, apart from such semi-religious literature like the puranas, contain refer-

ences to the interest which the Rishis took in the affairs of the State. In the forest, Yudisthira was councelling patience; but Draupadi and Bhima were urging for immediate military action. Meanwhile Vyasa came and brought about a compromise, advising patience till they had concerved their strength and at the same time suggesting that Arjuna should go and win the invincible weapon from Lord Siva. This is the subject matter of a work called the Kiratarjuniya by Bharavi. When India was being trampled by foreigners, there was the need for the reunion of Indian life with godliness so that a real national hero might be born. It is the Rishis that brought about this reunion of Indian national life with Godliness. This is the subject matter of Kalidasa's Kumarasambhava. spirit of the entire Sakuntala is that the so-called dwellers of the forest colonies were far more practical than the men in the cities and the great Rishi Kanva says that although he was a resident of the forest, he was not ignorant of the needs and ways of city life. When King Dilipa was being tormented by the fears of a great calamity to the kingdom, he went to the forest to Vasistha for advice. When Vasistha met him, he asked about the affairs of the State. All these things prove that in those days, the Asramas were the centres of higher knowledge, both its advancement and its propagation. Such higher knowledge was also intimately associated with the affairs of the State and the life of the common people. The Rishis, who were in charge of the Asramas, were deeply interested in the affairs of the common people and advised the State whenever the State was in need of detached councel.

The Asramas were not isolated institutions completely shut off from the life of the people in the cities and in the villages. Vasistha's Asrama to which Dilipa went for advice was only an afternoon's journey from capital of the King. The Capital of Dusyanta was only two days journey from the Asrama of Kanva. The kings could drive up to the gates of the Asramas in their chariots drawn by horses, which showed that the Asramas were not situated in dense forests to which approaches could be had only by the use of hatchets every time for cutting down trees and shrubs. They were on the main thoroughfares between cities.

Just as when Raja Sir Annamalai Chettiyar of Chettinad conceived the idea of starting an institution for advanced studies, he selected a place on the highway between the important cities of the province, but sufficiently detached from the noise and bustle of cities, and in the suburbs of an important town, similarly in ancient India also, when the Rishis desired to set up an Asrama, they never selected the centre of a city as the site. Even now when on account of the development of cities, localities which were fairly quiet become busy centres, educational institutions which were originally established in such places are being moved over to the less crowded parts. The same was the principle which governed the selection of sites for Asramas in ancient India also.

Every such Asrama was a University or at least a college in those days. Rich men and the State patronised such institutions. Rich endowments and occasional subsidies made the development and maintenance of such Asramas possible. In Raja Sir Annamalai Chettiyar we see the worthy inheritor of such a

Asramas and the modern Universities is that while in ancient India, public life and the administration were guided by the wisdom developed in such Asramas, we do not find the State and public leaders seeking and receiving the same guidance from modern Universities. I close this Paper with an appeal to the Raja Saheb to see that the State take better advantage of the intellectual atmosphere of the Universities where there is a clear understanding of the needs of the world but where the complications and previous commitments of administrative details would not vitiate the search for a proper solution and thereby to see that modern Universities are elevated to the same high position of the Asramas in the national life of the country.

CHEMISTRY AND MODERN WARFARE

A. P. MADHAVAN NAIR. M.A.

T

No school of modern thinkers will subscribe to the view that Science is an end in itself and that its purpose is the pursuit of pure knowledge for its own sake with no practical social function to perform. Science is and has been, exercising a profoundly vital and revolutionary influence on society. There is no phase of modern civilization, no aspect of the civilized man's material existence, which science has not embellished, made richer, fuller and healthier. But no critics are needed to point out that this is only one side of the picture. On the other side, we are confronted with the gruesome spectacle of scientific inventions and discoveries being used, or abused, to an ever-increasing extent for wholesale destruction and devastation. So much so, the unmixed admiration of a past generation for science and its achievements has given place to grave scepticism and a growing sense of alarm. This sinister aspect of the application of science has been brought home, with vividness and emphasis, to the present generation which has lived to participate in or at least to witness two Great Wars. In the interim between the two wars, when the premier nations were muddling through abortive attempts at World reconstruction, the entire blame for all the ills of modern society and for the total inefficacy of the proposed methods of cure, used to be laid at the door of science. Drastic steps, such as a total suppression of science and its discoveries, were often

advocated. The Bishop of Ripon, addressing the British Association in 1927, said, "......Dare I even suggestthat the sum of human happiness outside scientific circles would not necessarily be reduced, if, for ten years, every physical and chemical laboratory were closed and the patient and resourceful energy in them transferred to recovering the lost art of getting on together and finding the formula of making both ends meet in the scale of human life.....". This, if taken literally, is a counsel of despair, which leads us nowhere.

How far does science merit the indictment that it is the root cause of all the complex and apparently insoluble problems that modern society is groaning underproblems such as the periodic recurrence of war with all its attendant horrors, the widespread prevalence of acute poverty in the midst of plethoric plenty, and the general financial chaos? Modern social evolution took a tragic turn when Man achieved mastery over Nature before he could master his own baser self. He lacked the ethical and moral equipment necessary for a healthy assimilation of his newly acquired knowledge. Jealousy, greed, the urge for competition and the craving for combat continue to be his main impulses even after ages of evolution. No wonder then that he should prostitute scientific knowledge for purposes of self-aggrandizement.

If, by a miracle, all the accumulated scientific knowledge we possess today were to be wiped out, thereby enabling us to start afresh on a clean slate, could we then confidently look forward to an era of uninterrupted peace and harmony? No, all indications are to the contrary. Man will still continue to fight, resorting

to the primeval, crude methods of fighting. It might be said that ruin on the same widespread scale as now will then become impossible. But in place of a war which the excellence of modern armaments would make short and decisive, you will have an indecisive, long-drawn-out struggle extending over centuries in which destruction and devastation will be no less extensive than now.

Science has never started a war. But it is true that when war starts, out of causes beyond the control of science, all the scientific resources of nations are mobilised for the successful prosecution of war. The entire output of the nation's scientific research is in effect commandeered in war-time, and becomes state-controlled. No doubt, science loses its international character and outlook, for the time being. But this is inevitable, and science can hardly be blamed for it. To take a parallel, in times of war all able-bodied men are called up for military service. Would anyone therefore seriously suggest that the establishment of permanent peace will be feasible, only if young men were prevented from developing a good physique? No less absurd is the suggestion that in the interests of peace, science and scientific research must be given a burial.

When reviling science as an agent of mass annihilation, let not the critics forget the magnificent contributions of science to the defensive and humanitarian aspects of modern warfare. It is not always that this laudable role of science in the conduct of war receives all the recognition it deserves. In performing such vitally important functions as the development and perfection of effective systems of defence against the enemy's latest weapons of offence, the supply of foodstuffs of

adequate nutritive value by supplementing or supplanting natural food with synthetic and substitute materials, the prevention and control of epidemics and other diseases—in all these, the Nation, in its hour of need, puts its entire trust on the indefatigable labours of its small army of scientists.

II

In the conduct of modern war, the laboratory is being recognised in an ever-increasing measure as an indispensable military adjunct. It is the responsibility of the chemists, working in the laboratory or in the factory, to furnish war materials of basic military importance without which the prosecution of war for a single day would be impossible. These include explosives, poison gases, synthetic products of various descriptions, besides metals and alloys for numerous constructional purposes. Among these, explosives occupy a position of paramount importance in warfare. Except on such rare occasions as when the intrepid Greek army routed the Duce's invading hordes by the simple process of disembowelling them with bayonets, we seldom hear of operations with weapons not involving the use of explosives.

The first explosive to be used for military purposes was gunpowder, the introduction of which in fourteenth century Europe, is epoch-making in more respects than one. It opened up an altogether original form of warfare in which chivalry had no place, and mere brawn ceased to be the deciding factor. The necessity for devising guns and cannon proved a great impetus to metallurgical and other industries. It is remarkable that gunpowder with its numerous defects as an explosive, held the field as

the only known military explosive for over four centuries. The nineteenth century witnessed the phenomenal growth of Chemistry as a science, and one of the directions in which chemistry developed was in the synthesis of new and powerful explosives which rendered gunpowder obsolete.

Modern explosives are best classified as propellants, high explosives and detonants, according to the use to which they are respectively put. Propellants by their explosion within the gun eject the projectile with a tremendous speed to carry it to the desired target. Modern propellants contain one or both of the well known explosives, gun-cotton or nitro-cellulose, and nitroglycerine. The latter, which is too dangerous an explosive to be used in the pure state, is usually mixed with some diluent such as "kieselguhr" (or diatomaceous earth), or wood flour, and the resulting product is known as dynamite. Cordite is a mixture of nitro-glycerine and gun-cotton with a stabiliser such as vaseline. It may be mentioned in passing that the brilliant researches in this field were accomplished by the great inventor, Alfred Nobel, who is also known as a great benefactor and the founder of the world-famous Nobel prizes. Let us not overlook the significant fact that one of these prizes has been earmarked for the promotion of peace!

The projectiles used in war, shells, bombs, torpedoes or grenades, are charged with explosives of great "speed", generally known as high explosives. Before the last war, the only high explosive used in shells was picric acid, or lyddite. This was completely superseded during the great war by other high explosives, like T. N. T. or trinitro-toluene which, alone, or mixed with ammonium nitrate, another high explosive, is in use.

Other more powerful explosives like liquid oxygen, or a mixture of ammonium nitrate, carbon and aluminium powder, have been proposed from time to time, and some of them may be presumed to be in use in the present war.

Detonants are extremely sensitive explosives employed only in very small quantities, just for the purpose of initiating the explosion of a high explosive in a shell or a bomb. The best known instances are mercury fulminate and lead azide. On impact with the target, the percussion of a needle causes detonation of the fulminate which, in turn, causes the explosion of the high explosive.

TIT

Chemical warfare, or the use of poisonous gases or liquid sprays or finely divided solids which produce casualties by their physiological action on the human system, was initiated by the Germans in the early years of the last war. The immediate tactical value of this new weapon was immense, inasmuch as it was used against the ill-defended allies. The element of surprise added to its horror. Casualties mounted up to a record figure. The allied lines were broken, and the morale touched a dangerously low level. It would appear that if the Germans had fully exploited this initial advantage, the tide of the whole war would have been turned in their favour. But the scientists in the allied countries quickly rose equal to the situation, and immediately put into use defensive apparatus, hastily devised and imperfect no doubt, but sufficiently effective in combating the new menace. Further, the terrific allied counter-attacks with the same weapon of offence baulked Germany of a possible victory.

There is as yet no evidence of chemical warfare being adopted in the present war. Hitler's hesitation in using this form of warfare can hardly be attributed to any humane considerations he may happen to possess. Possibly he must be having serious doubts about its tactical value when employed against the thoroughly prepared and well-equipped allied armies. Further, he cannot be under any illusions about the ability of the allies in giving back harder and surer hits in this line as well. But one would not like to prophesy in these matters, and one cannot rule out the possibility of chemical warfare playing a decisive part in the later stages of the war.

A War "gas" is a poisonous chemical substance which, for its successful use must possess some important properties, such as marked toxic effect even when diluted with air, stability against chemicals which may be employed for its absorption and removal, and a higher density than air which would prevent its easy diffusion into air. Besides, there is the all important economic factor—the ability of the nation for large-scale manufacture of the substance from the available raw materials at a reasonable cost. Of the 3000 substances examined during the last war, barely 30 came up to the prescribed standards, and only 10 or 15 of these could be actually used.

Based on the experience of the last war, these substances can be classed into different groups according to their physiological action. Thus there are lung irritants, vesicants or blistering agents, lachrymators or eye irritants, nose irritants or sneezing agents, paralysants or nerve poisons, and blood poisons. Chlorine, the

first war gas to be used, is a lung irritant. While it combines in itself several of the desirable properties of a war gas, it possesses a serious defect viz. its high chemical reactivity and the consequent ease with which it can be Within six months of its introduction, absorbed. chlorine gave place to another lung irritant, phosgene which proves fatal on exposure at higher concentrations. Numerous chemicals have been used as lachrymators not only in warfare, but also in times of peace, for dispersing hostile and unruly mobs. Many of these substances have marked action even at as low a concentration as one in a million. A compound known as chloropicrin forms a class by itself in as much as it causes nausea and provokes vomitting, thereby making it difficult to wear gas masks. Shells of lethal gases alternated with shells of chloropicrin will therefore constitute a very effective attack.

During the summer of 1917, the Germans introduced two new and powerful war gases: sneezing gas or diphenyl chloroarsine, and mustard gas or dichlorodiethyl sulphide. The so-called mustard gas, which is actually a liquid with a boiling point much higher than that of water, is the nearest approach to the ideal war gas, and was extensively used in the years 1917 and 1918. During the ten days of the Fall of 1917, it is estimated that the Germans used nearly 2500 tons of mustard gas producing an alarmingly large number of casualties. Within a few months, however, the allies were able to attack the enemy with his own weapon on an unprecedented scale, thanks to the discovery of a new method of manufacture of the substance by the British Chemists, Pope and Gibson. Besides its action on the eyes causing temporary or permanent blindness, its vesicant or blistering action on the skin producing painful wounds is its important physiological action. Another attribute which makes mustard gas unrivalled as a war gas, is its persistence. Owing to its high density and high boiling point, it sinks into low places, lurking in trenches and penetrating crevices, for days and weeks. This persistence in time and space confers on gas warfare a tactical value all its own.

Chemical warfare is often condemned as an inhuman and fiendish invention of science which must be banned for ever from the approved forms of warfare. There are many scientists who maintain that chemical warfare is in fact a more humane method of incapacitating the enemy than the so-called approved methods of warfare. One might say that if war can at all be justified, all tactical steps undertaken for its successful prosecution must also be justifiable. One wonders whether, after all, there is so much to choose between two equally destructive forms of warfare. In Professor Low's words, "Whether it is better to be poisoned by mustard gas, torn to pieces by a hand-grenade or disembowelled by a bayonet, is a matter of personal taste."

IV

The role of science, especially of chemistry, in saving human beings from the jaws of death, is, paradoxically enough, never so significant as in war time. The launching of a new type of offensive like gas warfare or magnetic mine is a spur to scientists to devise an effective defence as expeditiously as possible. It has been remarked that the ingenuity displayed by scientists in devising new weapons of attack is equalled only by the rapidity with which scientists themselves invent defensive

measures to combat the new terrors. The development of the gas mask in the last war, and the recent degaussing or demagnetising arrangement for ships which completely eliminates the danger of magnetic mines, amply illustrate the above statement.

Another aspect of the humanitarian services of science is the development in chemotherapy involving the synthesis of highly efficacious drugs such as the sulphanilamide and sulphapyridine groups of compounds which verily take out many a sting from the wounds of war.

The chemist renders valuable service in solving the food problem of the nation, in at least two ways. In the first place he sees to it that a balanced diet with sufficient energy-producing material and with an adequate amount of vitamins is supplied, and thereby reduces to a minimum the dangers of under-feeding and of the incidence of deficiency diseases. The collapse of Germany in 1918 is often ascribed to the poor and defective nature of the food then available. It would appear that the nation had no stomach for continuing the fight. The expert advice of the chemist is needed also in solving the food problem in another important manner, by stimulating intensive cultivation of the arable land with the help of artificial fertilizers.

It must be evident from the above review how a full mobilisation of the resources of science is indispensable for success on the War Front as on the Home Front. Failure to grasp this fact in time has been the undoing of many a nation in the last two years. Even Britain, in some of her most desperate days last year, realised all too bitterly that the Nazis were using science with much

better effect to their advantage. With the almost unlimited resources of the Empire and of America at her disposal, there is, however, no reason why Britain should not excel the enemy "in the effective utilization of scientific thought, scientific advice and scientific personnel", and thus pave the way for an early and complete victory.

AN IDEAL PATRON OF WOMEN'S EDUCATION By

K. G. MANGALAM, B.A., L.T.

Not less important than any of the manifold philanthropic activities of Rajah Sir Annamalai Chettiar is the unique and unbounded patronage readily extended by him to the cause of women's education in this University. Ever since the early days of the Sree Minakshi College which was the nucleus of the present University, it was one of the happy features of that institution to have afforded splendid facilities for the co-education of boys and girls in every branch of the institution. It is indeed a source of great gratification to see women graduates of this University occupying positions of responsibility in various spheres in different parts of this Province. While some of them are holding responsible posts as lecturers or teachers in the Educational Department, there are others who have gone up for higher studies elsewhere.

The most important of all the facilities afforded in this University for women's education is the maintenance of a separate Hostel for women students located in a fine artistic building in a convenient locality in the University grounds. The accommodation provided in the Hostel, and the various arrangements made for their comfortable residence have been highly spoken of by several distinguished visitors who have honoured the Hostel with their visits, on different occasions. The strength of the Hostel which was only nineteen in the beginning has gradually come up to forty-eight in five years. To meet further needs that might immediately arise there is

accommodation for a total strength of 60 students in the Hostel. More than one-third of the women students have taken up music for their training in the Music College, while the rest are distributed over the various branches of the Arts and Science departments.

The Rajah's ardent love and keen interest in music have taken shape in the maintenance of a separate Music College with its fine building and its staff of expert musicians. It can claim to be the only institution of its kind in this Province. The excellent arrangements made for running this institution are naturally attracting a large number of girls from distant parts of this Province including the Native States, nay, even from Ceylon in quest of the knowledge of this fine art.

Not content with these efforts for developing the knowledge of Indian Music, the benevolent Rajah Saheb made a handsome donation of Rs. 10,000 last year for the advancement of Tamil Music in particular and for the encouragement of the composition of original Tamil songs.

In addition to the several scholarships which the University grants, the Founder helps several deserving women students with adequate sums of money to enable them to prosecute their studies in the University.

As a happy coincidence in furtherence of the noble cause to which our Rajah Saheb has been keenly devoted, the University has been specially lucky in having as its Vice-Chancellors such highly cultured gentlemen of International fame as the Rt. Hon'ble V. S. Srinivasa Sastriar and Dr. Sir Kurma Venkata Reddi Nayudu Garu. In performing the pleasant function of unveiling the portrait of the former Vice-Chancellor, His

Excellency Lord Erskine, Governor of Madras, has rightly observed "There are no hands to which I would more gladly entrust the task of guiding the education of the youth of this country and no example of which I would more earnestly ask you to follow." And it has been rightly said of the present Vice-Chancellor that he is dedicating to the service of this University the treasures of wisdom and experience which he has garnered during decades of unremitting public service. It is hardly necessary to emphasise the very keen interest taken by these two officers in promoting the cause of women's education in the University.

The Rajah Saheb's devotion to the cause of women and their welfare has taken shape in the construction and equipment of the Ladies' Club, Annamalainagar, along with similar institutions founded or encouraged by him elsewhere in the country such as the Willingdon, Madras, the Lady Pentland Women and Children's Hospital in Chettinad, the Lady Ampthil Nurses Association, the Lady Irwin College, Delhi, the Nilgiris Ladies' Club, the Mylapore Ladies' Club as well as the Girl Guides' Movement and the Madras Seva Sadanam.

Such in brief are the varied acts of benevolence and philanthropy of the Rajah as a worthy descendant of the illustrious family of Kanadukathan in consonance with the innumerable acts of liberal charity and piety done by this family from nearly a century ago. Can the women of this Province ever dream of repaying the deep debt of gratitude which they owe to his unbounded generosity? The answer is not far to seek. The extent and nature of the Rajah's noble generosity can only be compared to itself just as Valmiki, the Father of Sanskrit poetry has rightly observed in his

famous Epic Ramayana that the beauties of the mighty ocean and of the sky can only be compared to themselves. "Gaganam gaganakaram, sagaraha sagaropamaha." So when the unbounded generosity of the Rajah cannot possibly be compared to anything else, it goes without saying that it is next to impossible to even dream of the possibility of repaying the debt which we all owe to him.

Verily as the Sun and the Moon, the brightest jewels in the Lord's creation are never tired of shedding their celestial lights for the growth and prosperity of the World our beloved Rajah Saheb whose selfless devotion to noble causes is in accordance with Lord Sree Krishna's teaching in Bagavad Gita will surely continue his unremitting love for the promotion of women's education.

Let us send forth our devout and unceasing prayers to Lord Nataraja on this auspicious occasion of the sixty-first birthday of our generous and noble Founder for his long life of continued prosperity and unalloyed happiness.

BRITAIN AND U. S. A. AFTER THE WAR

M. K. Muniswami, M.A., B.L.

PREFATORY NOTE.

Those who try to envisage new trends in future world economy can at best only look into the immediate future and even then the shape of the post-war world cannot be seen in all its essentials. On assumption that the economic consequences of this war may not be altogether different from those of the last war, I have confined my discussion in this paper to such problems of a peace economy as dislocation, debt, and distrust which may arise soon after the war is over.

Britain to-day is in a much better position to mitigate the shock of post-war demobilisation of men and capital, as she had had the experience of the period after 1919 and of the post-depression adjustments to solve the still unsolved problem of the dislocation caused by the last Great War. Most economists in Britain, to prevent slump conditions after this war would like to organise British economy on the Nazi pattern, though they take care to stress the difference between such British economy and the present Nazi economy in that the former would be the result of democratic decisions and subject to democratic control. The Economist (17th May 1941) has begun to speak of the impending postwar boom in England. The havoc caused by the Luftwaffe would necessitate reconstruction of the devastated areas; after the experience through which the British public have passed under the present rationing regime, there might be an increased demand for all manner of consumers' goods. There might, in fact, be an excessive demand over supply and it might become necessary to continue rationing for some time after the war. The payment of the Dole to the unemployed and extension of instalment credit facilities—two features absent in 1919 are likely to exert their beneficent influence.

Optimistic forecasts as to the course of world trade are based on the known demand for liquidating damage done in the war as also the improved distribution of They do not take into account such factors as the more or less permanent reduction in British merchant tonnage or the repatriation of overseas investments which have paid for Britain's imports during this war period. Nor do they take into account the handicaps under which Britain's export trade will suffer, when German competition in coal, steel and chemicals recurs and take into account the need for British assistance to the many European governments, with their headquarters in London and now inalliance with Britain. The scope for British exports in future would depend largely on the nature of the European peace settlement. present war-time industries especially in Canada and Australia would reduce the markets that British manufacturers enjoyed before. Reapproachment of U.S.A. and Canada on the one hand, and the South American Republics on the other would make British export trade prospects gloomier. It is not likely however that British export trade would altogether disappear, for Britain with her experience of the trade drive in recent years, and with her increased efficiency in manufacturing skill, born of the application of scientific research to war-time industries, is likely to renew her invasion of Central European markets. As in 1920, in the period after this war, Britain may not find difficulty in elbowing out Japan from the Indian and Colonial markets. Professor Nevins of Oxford has referred to the impending conflict between the U.S.A. and Britain in the South American and Asiatic markets, in a recent issue of the Spectator. The possibility of friction between U.S.A. and Britain is not confined to industries alone: America like some other countries of the British Empire and South America may wish to sell meat, grain and cotton, while Britishers importing these commodities from the Empire, and from South America may not be keen on importing them from the U.S.A. Instead of looking to the South American and Dominion markets, a writer has suggested in the Political Quarterly that Britain would do well, bearing in mind the feeble results of the Ottawa pacts of 1932, to look the prosperity of her export trade in Central and Eastern Europe. He stresses that something like the present German plan for inter-European trade must be preserved. In the event of Anglo-American co-operation he also suggests that the U.S.A. may well play its part in building up electrical power stations and mechanising the agriculture of Eastern and Central Europe. Secretary to the U.S. Treasury has stated that the huge reserve of gold would be available to repair the ravages of the present war in Europe. The continuance of 'Hitler's new economic order' would be a powerful threat to both the export trade of the U.S.A. and the future value of her gold stocks. Any reduction in the world value of gold in the future, besides upsetting existing exchange rates and causing further dislocations in foreign trade would affect all those Governments and Central Banks that have written up the value of their gold holdings. As the U.S.A. after the war is likely to have large surpluses of both agricultural produce and manufactured goods it would be to its own interest to maintain without alteration the existing exchange rates. The trend of economic life in Europe after the war cannot but have a permanent effect on Britain. The increase of war debts, taxation and the destruction of productive equipment are going to have a definite effect on Britain's foreign trade. No immediate revival in commercial intercourse with lost markets can be hoped for.

Depreciation of sterling however would seem to be inevitable in the case of Britain. During this war it has of course been the preoccupation of Britain to maintain the cross-rate, as any lower rate of exchange would increase the burden of sterling payments for purchases made from the U.S.A.; but after the war depreciation of sterling would enable Britain to improve her balance of payments. An additional virtue of such a step would be the reduction in the burden of the huge-short-term debt that she has contracted. The Economist has calculated that no less than 1,400 million pounds have been borrowed in the form of Treasury bills and that loans from banks, during the last eight months aggregate to 490 millions. There is not likely to be any desire "to look the dollar in the face " after this war. The havor caused to British export trade by the Gold Standard Act of 1925 must be still green in the memory of Mr. Winston Churchill. Given the rate at which national debts are piling up the world over, the need for alleviation of the real weight of debt, will be stronger after the end of this war, than at any time in world's history. The existing 100 per cent E.P. duty has taken profits out of the present war and as the net profits of most British companies have not increased, in recent months, the capital value of their plant in any post-war valuation is not likely to go up, in order to enable the Treasury to introduce any capital levy.

Currency depreciation may give rise to some measure of protection to all home industries including agriculture. Such protection accruing to British agriculture would be all the more valuable when the British market is exposed to the fire of cheap Central European agricultural production. If the external depreciation of this sterling is insufficient to restore equilibrium to Britain's balance of payments, a policy of internal economic expansion may have to be adopted. Already Reconstructors are at work preparing tentative plans for starting new post-war industries, especially for civilian requirements in Britain. If British banks and the general body of British investors finance new industries, such as radios, television apparatuses and refrigerators, the shock of the present war's dislocation may be reduced. To help such new industries, and to relieve unemployment in the "Special Areas 'Britain would have at least to continue, if not intensify, existing protection. In the rehabilitation of British economy on a peace time basis, both sympathy and co-operation from the U.S.A. would seem to be called for. It ought to be the pre-occupation of the statesmen of the two countries to avoid points of friction and conflict that are likely to be numerous after the war. We have only to hope that the U.S.A. with the painful experience of repercussions on her economy by her pursuit of a policy of autarky, coupled with exchange depreciation before 1934 would now turn over a new leaf

and charitably tolerate Britain's attempts to stabilise her own economic system by pursuing the twin remedies of exchange depreciation and public works. Otherwise she might be confronted with a default of the debts that Britain has just begun to raise after her discovery that her scheme of Empire Dollar Pool to finance her war purchases, is inadequate. Let us all hope and pray that recent world economic history will not repeat itself, culminating in a greater depression.

A FREE UNIVERSITY FOR INDIA

By

DR. A. NARASINGA RAO, M.A., L.T., D.Sc., F.A.Sc.

Scientists tell us that the first appearance of Man on the Earth occurred in comparatively recent times—barely a million years ago. In fact, if the whole life history of our planet could be compressed into 24 hours from midnight to midnight, we find no traces of life for the first 12 hours; 7 p.m. finds the seas inhabited by fishes and amphibia while at 8 p.m. the giant reptiles are lords of the earth. Mammals, of whom Man is a member, appear only at 10 p.m. and the Piltdown Ape-man peeps out fugitively at 23 hours 59 minutes! The whole of our known history of about 10,000 years from the time of the Sumerian civilization to the present day would correspond on this scale to just half a second!

And yet, if within this very short interval Man has built up a social structure which has made him well nigh lord of the earth, sea and air—though it contains dangerous elements of instability as recent events show—this success is to be attributed to his capacity for abstract thinking and to two inventions which his more fertile brain made at the very infancy of the race, namely speech¹ and writing. The former enables an individual

¹ Animals have various invariable sounds expressive of pleasure, caution, warning, calls to congregate etc., monkeys being the most voluble, but no animal has yet passed from single words to sentences. The brain of the chimpanzee corresponds in all physical details closely to man and has even Broca's convolution which is the seat of articulate speech and yet they have not learnt to talk.

to profit by the experience of another, while the latter ensures that anything of value, once discovered, is not lost to the race but will form the foundation for later generations to build upon. Knowledge becomes thus an ever-growing store of human experience. Now, any one-way process, however slow and weak will after long ages produce effects of far greater significance than another which, though powerful, does not act always the same way. It is this growing heritage of racial experience which has made the human species what it is today.

Man recognised early the value of this inheritance and made efforts both to hand it on to the next generation, and latterly, to add to its total content. These two functions which correspond to teaching and research, and what is even more important, a training in abstract thinking which differentiates man from all other animals, have been entrusted by society to various types of educational institutions with the universities at the apex of the scheme inspiring and guiding these activities. Thus higher studies and research are not the luxuries of age of leisure but the very life-lines of human evolution through which the race has drawn its vitality and its power. Even from the narrower standpoint of national well being, universities provide that background of pure knowledge which is necessary in an age of rapid progress and keen competition to enable each changing situation to be met effectively as it arises. There are few benefactions of greater service to the nation and the race than the foundation of an educational institution.

That there has been a lot of jerry building in the structure of human civilization is undeniable. There is maladjustment of means to ends almost everywhere,

while the introduction of a money economy with all its flexibility and stimulus to economic activity has made possible a dangerous concentration of power in wrong hands. Above all, the failure of man's moral education to keep pace with the training of his intellect and his progressive control over matter threatens the very extinction of the species in suicidal conflicts. Man has left many a Tobruk in his triumphant forward march and is paying heavily in human suffering for their reconquest. In this contribution I propose to deal with one of these maladjustments in our social structure.

If the supreme importance of higher education and research both for the race and for the nation be even partially conceded, it is necessary to ensure that every one whose natural endowments fit him specially for such a course should be picked out and given this training. Our present day organisation does nothing of the kind. It has made university education a costly commodity to be purchased by those who can afford it, thus introducing economic considerations into a field where they are irrelevent. In fact even secondary education is almost beyond the means of most middle-class families in India. If we had planned rationally, there would have been provision for the poorest boy or girl in the land to study up to the highest standards provided he or she had abilities of a sufficiently higher order. One of the steps in securing this objective would be the establishment of a University in India where no fees are levied and where those who are poor will receive also free boarding. Let us take a closer look at this unique institution.

Its alumni will be drawn from all over India and will be a group of exceptionally gifted individuals of

both sexes, many of them coming from very poor families. The total number will have to be restricted say to a thousand in the first instance so that it may be run on efficient lines and the demand for this limited accommodation from all over the country will enable the institution to maintain the high standards of admission. Obviously the education of these gifted individuals will have to be carefully planned and should not be confined to lecture hours only. It will have therefore to be a university, for otherwise it will not have the freedom to plan its course of studies, and it will have to be fully residential both as regards its staff and its students. The course of instruction might well include besides the usual subjects of study, an acquaintance with the outstanding events in world history, the main landmarks in the march of modern science, and some knowledge of the mechanism of the human body. Even more important will be the attempt to educate the sense of order, rhythm and harmony which is part of our racial inheritance. A knowledge of sketching and a capacity both to sing and to appreciate good music and works of art would be the normal equipment of every student. But in the development of the personality of the alumni the greatest stress will be on the moral side. The idea of service and cooperation will be kept always before them and many opportunities created for their exercise. There will be no religious instruction in the orthodox sense but the students will have had a sympathetic acquaintance with the manner in which the great religions of the world have approached the problems of the spirit, and of those ethical principles common to all religions. I know that the education of the moral side of man is one which bristles with difficulties. But we have the experience of

the Boy Scout and similar movements which have partly tackled the problem, while psychology is everyday providing us with fresh information regarding the analysis of personality. The issue is of such paramount importance that it has got to be faced and attacked from various angles and even a partial success would be well worth the attempt. In any case we do not solve the problem by ignoring it.

Granted the desirability of such a free University in which the poorest Indian could read up to the highest classes, it may be asked is it a practicable scheme. In particular is there any existing University which is so well endowed and run on such economical lines that the wiping out of its entire fee income will still enable it to carry on its activities, and which is besides residential, unitary and compact? I think the Annamalai University just fits into this picture. Its permanent endowment fund of 40 lakhs, the joint gift of its generous Founder and of the Government has by a careful husbanding of resources, increased to 60 lakhs. The interest on this fund together with the annual grant of 1.5 lakhs from the Government makes up nearly 4 lakhs or roughly 80 per cent of its total income. The net fee income (including tuition, examination and special fees less the amount paid back by way of scholarships) amounts to about 13 per cent of the total income while the other 7 per cent is made up of miscellaneous receipts which will not be affected by the abolition of fees.

One may speculate on the consequences of this bold step of a total abolition of fees. It will create an institution unique not only in this country but perhaps in the whole world, and entitled on that account to the generous support of both the Princes and People of India in the performance of its noble task of training a band of young men and women of character and ability who would otherwise have been lost to the country. Its alumni are bound to rise to positions of leadership, and some of them at least would welcome an opportunity of helping financially the institution to which they owe so much. These benefactions would all be invested and their interest utilized for gradually expanding free boarding to those in need of such help until it is in a position to lodge, board, and educate all those whom it has taken under its wings.

The idea is by no means new and accords well with the Hindu ideology which has too high a regard for knowledge to treat it as an economic commodity. In the old Gurukulas and even today in the patasalas we have a system of free education up to the highest standards open to the poorest in the land. Is it unreasonable to suggest that the same principle be applied to the more dynamic and modern type of education which is needed in the world of today? India with her age long experience of things of the spirit has surely something of the value to contribute to the stabilising of the unsteady structure of modern civilization and has herself much to learn in evolving that synthesis of the old and the new which is the hope of the human race. In this supreme task and in the more practical but formidable problems of reconstruction which face her today. she will need the services of every one of her gifted sons and daughters trained to the utmost of their capacities. Will Tamil Nad which has often been a leader in matters intellectual be a pioneer in this field? Let the Gods decide.

A foolish dream, a castle in the air? Perhaps it is. But Man is a dreaming animal whom the memory of his dream haunts even after he is awake. Foolish men dreamt in the distant past that they could cross the measureless ocean and other fools have dreamt that they could fly in the air like birds. Man has always been an architect of aerial castles and has ever sought to rebuild them on earth "with faith and courage", two of the toughest materials in the universe. The world can ill afford to lose its dreamers, for is not the world itself a dream of Iswara? May those stirring words of the greatest dreamer of this age echoing from his still warm funeral pyre receive a literal fulfilment:

"Where the mind is without fear, and the head is held high, Where knowledge is free,

Into that Heaven of freedom, my Father, let my country awake."

RAJA SIR ANNAMALAI CHETTIAR SAVANT AND PATRON OF TAMIL LITERATURE By

C. PANNIRUKAIPERUMAL MUDALIAR, M.A., B.L.

Head of the Department of Tamil, University of Travancore.

Rajah Sir Annamalai Chettiar is one of those rare beings, whose arrival upon this planet of ours is at once their moment and our opportunity. Large-hearted and discriminating generosity is the lodestar of their existence; and it is the duty as well as the interest of lesser folk to draw upon such reserves of charity and help to canalise them in those fruitful directions indicated by the donor. Rich is wisdom, noble in feeling, transparent in sincerity, no South Indian in recent times has displayed such multiplicity of interests in life or given equally generously for their promotion. But the quality of a man's life or character must be judged not merely by the arithmetical reckoning of the number of things he does, but by the nature of the particular things he elects to do and by the way in which he does them. Every one of us knows how numerous are the Raja's charities. But that by which he will be longest known and most entitled to the imperishable gratitude of the present and of succeeding generations is the founding and inauguration of the Annamalai University.

Himself a savant, Rajah Sir Annamalai Chettiar has never been happier than when he declares himself, in deed as well as word, a votary of the Goddess. Vani. He worships at many shrines, but he is oftener found in the Temple of Learning, enriching it with his pious offerings. The stream of his generosity sent its fertilising waters across the sacred soil of holy Chidambaram, so dear to the heart of every Hindu. And then there sprouted forth the little flower, the Sri Minakshi College, the nucleus of the Annamalai University. The stream now swelled into a flood, the little college refused to satisfy the deep hunger of his soul full of an inextinguishable passion for Tamil literature and culture; and the little, tenderly cherished flower of yesterday, broke into the crowded splendour of the present University. Annamalai University fulfils many objects which a University is expected to do, but its uniqueness and individuality lie in its declared aim to promote and encourage the study of Tamil language and literature. In this sense we can regard it as being, at once, the proud symbol of one man's spirit of giving and the happy fulfilment of the dreams of many. Eager, expectant Tamil Nad welcomed this fine gesture of the noble Raja with a warmth of affection that will take long to die, and paid and continues to pay its grateful tribute of reverence and love to the man who has thus helped to translate its soul-hunger into this living edifice. Could there be anything more worthy of the noble generosity of the donor or more entiled to the admiring gratitude of the donees?

Not only has Raja Sir Annamalai Chettiar spent lakhs upon this child of his dreams, but he continues to feed it with recurring donations and endowments, ever cherishing it with the watchfulness of a loving parent. This is a pleasing reminder to us that the Annamalai University is not the sudden gift of impulsive generosity but the result of a carefully planned, deeply pondered answer to a public need. Recently in South

India we are witnessing a remarkable public interest in the promotion and popularisation of the Tamil language. The shabby and step-motherly treatment once accorded to Tamil is now but a painful memory, though humitiating enough when we recall it. Soon a reversal of values took place with our increasing sense of nationalism and a better knowledge of the inestimable glories of our Tamil literature. And so to-day the heart of every Tamilian beats to a new tune and responds to other melodies than those till now familiar to our ears. How much the Annamalai University is the cause of this new resurgent sentiment, how much it is the echo and the gratification of it, it is difficult to assess. Nor is it necessary. But there cannot be any hesitation in declaring that Raja Sir Annamalai Chettiar has succeeded in expressing the new emotions and dreams of the Tamils in a form that age cannot wither nor custom stale. Tamil has regained its pristine place in the Temple of Learning and the Raja has honoured himself by honouring her.

The Tamil Pandits and Scholars of South India owe a deep debt of gratitude to Sir Annamalai Chettiar for a worthy recognition of their place and status in the University. The Raja of Chettinad has never been guilty of leaving things half-done or even three-fourths done. That is not his way. So long as a subordinate role or an inferior rank is assigned to teachers in Tamil, the promotion of Tamil culture cannot be achieved. Their work is as important as, and in the Annamalai University, perhaps, more important than that of others. Naturally the Founder felt the need for establishing a professorship in Tamil—the first time, I think, that we hear of a professorship in connection with Tamil. Some of the

greatest scholars in Tamil literature and culture have naturally been invited and provided with all the facilities necessary for carrying on research in that direction. An Honours Degree in Tamil has been instituted. Though the University of Madras admits candidates to offer themselves privately for a M.A. Degree in Tamil and South Indian History, the Annamalai University alone prepare candidates for a Honours Degree in that subject. The University of Travancore has followed Annamalai and is preparing candidates for a similar degree in Malayalam. The Raja has spared no efforts to complete the scheme he has in mind, which is nothing less than making South India Tamil—conscious, to make us think and dream of our dear mother-tongue every moment of our lives. Classes for the Vidwan Course, classes for the training of Tamil Pandits, a large number of scholarships and fee concessions, facilities and generous endowments for the publication of scientific works in Tamil, a College of Music and quite recently a liberal donation of Rs. 10,000 for encouraging and persuading our musicians to revive and popularise Tamil composers and compositions—all these are but some of the endeavours on the part of this Prince of Givers to give Tamil her due place in the cultural life of South India. It is a happy feature in the many-sided personality of the Raja of Chettinad that, in his grand schemes for the rehabilitation of Tamil, he never ignores that a work of restoration must not only involve a patriotic harking to the past but also a forward view of things. In conformity with the conditions of modern life he has felt the need for giving our Tamil Pandits, employing traditional methods of instruction, insight into the more modern psychological approaches of to-day.

The training classes have, therefore, a fine opportunity for adapting reformed methods to Tamil teaching. Similarly, the ideas and conclusions of modern Science must be made available to the public, as part of the regular democratic process. Tamil, though a highly flexible language, has not yet had the occasion to employ a suitable scientific terminology, shaped in conformity with its genius and yet flexible and resilient enough to express the ideas of modern science. Raja Sir Annamalai Chettiar has never shown a higher vision than when he organised a department for the publication of scientific works in Tamil. He has announced prizes of Rs. 1,000 each for the best books in Tamil on subjects of modern thought; and such books on Logic and Physics have already been published. This department is certainly a valuable adjunct to the Research Department in Tamil, which is doing eminent work. About the college of Music, it would be superfluous to say much. It is an unique institution and has inspired other people and other places to fresh activities in the field of Carnatic Music. I am inclined to think that Tamil Nad, music-mad as it has always been, has responded to this fine gesture on the part of the Founder in a manner that fills every heart with joy. To-day there is better, more critical and understanding enjoyment of music and by larger numbers of people, because of the impetus given by the Raja. In music we shall find our soul; and certainly Raja Sir Annamalai Chettiar has not only helped to inform but refine the soul of South India. The recent gift of Rs. 10,000 for popularising Tamil songs has become the subject of conference and discussion as regards the best way of using it; and the public will certainly not be disappointed in its expectations,

Great as are his gifts and donations to the Annamalai University, Raja Sir Annamalai Chettiar's generosity is not confined to this one mighty institution. Wherever a good cause languishes for lack of funds, wherever noble work is done, it is only a question of "Ask and it shall be given" and his purse-strings are unloosened.

Great men have always been honoured in our country; their noble services have always been praised and sung to many a tune. But I am confident that we, in our times, shall not be able to honour a greater person, one more worthy of our poets' songs of praise, more entitled to our gratitude, one to whom these poor, pitiful words of mine would be less adequate to express our reverence and love for great deeds nobly done. This Memorial Volume, our floral tribute to the Raja of Chettinad on the auspicious occasion of his Shastiabdapurthi, is our heart's token to this great man. It is an occasion, which gladdens every heart; and may our tribute be worthy enough! and usher in many more such occasions!

SETTI IN LITERATURE AND EPIGRAPHY By

V. R. RAMACHANDRA DIKSHITAR, M.A.

University of Madras.

I deem it an honour and a privilege to be associated with the commemoration of Rajah Sir M. Annamalai Chettiar, the founder of a great Institution—the Annamalai University. The Rajah of Chettinad belongs to the great ancient community of traders and bankers who have shaped the commercial and industrial life of India through the ages. Coming nearer home the Rajah Saheb belongs to the noble community of the epic heroes of the Tamil nad, Kovalan and Kannaki, of Kavirippumpattinam, one of the great centres of international trade, two thousand years ago. The origin and history of this community of traders and bankers is one of the fascinating subjects of Indian history, ancient, mediaeval and modern.

We meet with the term Setti in the Jatakas and Sreshthi in the Brahmana literature and the Atharva Samhita. The term Sreshthin or Sresthya in the sense of the Headman of a guild occurs in the Atharva Samhita (I.9.3) and in the Satapatha Brahmana (13.7.1.1), Aitareya Brahmana (III. 30. 3). (See also Kausitaki Br. 28. 6). The Sreshthi of the Brahmanas invariably means a banker.

The *Jatakas* which are said to be compositions of the 6th and 5th centuries B.C. speak of as many as eighteen guilds with their respective heads. The head of the guild is sometimes called a Setti and sometimes a Maha-

setti. The Settis were by caste members of the Vaisya caste, always the richest class in the land. Trade was their hereditary calling as also banking. The Indian industrial development in the pre-Kautaliyan period and also post-Kautaliyan period was largely due to the activities of the Vaisvas. Each profession had its own organisation, democratic in character. We call this a These guilds exerted enormous influence upon the economic life of the country in the several centuries preceding and following the Christian era. For in the time of the Guptas there is the testimony of the inscriptions as to the activities of these guild organisations. According to the Arthasastra of Kautalya (II.35) the Vaisyas were the great landowners and merchants. They were capitalists and money-lending was their profession in addition to trade and commerce. With the growth of trade and industry, capital got accumulated in the hands of a few, who were perhaps designated Mahasettis. The president of the guild was Pamukha or Jetthaka or Setti according to the Jatakas (I.120; II.335; III.49. etc.). In the march of time the professions became hereditary and fixed and a number of sub-sections of the great Vaisya caste came into being. Hence we find to-day a bewildering number of subsects in every caste of India. The one healthy influence of this hereditary occupation was to get more and more skilled in the arts of profession being handed down from father to son. Every Vaisya was so to say a born merchant. He brought to bear upon his trade his accumulated knowledge of centuries. With the rich background of tradition behind him the ancient Setti excelled in his arts and crafts and made a successful His products were in great demand by the peoples of the then known world-Rome, Carthage,

Ceylon and Islands of the Archipelago. Foreign gold flowed into India in abundance, and ancient India became famous for its wealth and splendour. This was true of both North and South India. The Sangam literature and foreign travellers bear eloquent testimony to the roaring trade of Tamil India with the foreign countries.

A critical study of the Jatakas gives us a glimpse of the social life of the Setti community in ancient India. In the Pali literature we meet with some interesting terms—Setti, Mahasetti, Anusetti and Uttarasettis. These terms are of much value to the antiquarian. They demonstrate clearly the social position held by the mercantile community and also the importance of that community in public life. The use of the term Setti in several places in the Jatakas shows that it was by itself a title, and was invariably given to the head of a guild. Therefore any guild president was a Setti.

The Mahasetti held a status much higher than the ordinary Setti. He was a wealthy capitalist. His aid and friendship were often invoked by the reigning chief. The state appointed Mahasettis as members of the royal council, as advisers to the king, as ministers and mahamatras. The Mahasetti represented in the royal council the banking and industrial interests, and advised the state on their industrial and economic policy. He helped the state in time of distress by advancing loans. He was again the leader among the Settis. Whenever disputes arose between any two guilds, it was the Mahasetti who settled such differences by arbitration. His decision was invariably accepted as binding. Thus the Mahasettis played a glorious part in the administration of the land. No wonder they were held in very high esteem by the

state and the public. The Jatakas reveal closer ties of friendship among the princes, Brahmans and the Settis. The sons of the members of all these communities had their education under the common teacher, and even some passages suggest that caste restrictions regarding interdining and inter-marriage were not so rigid as they became in later times. In a Jataka (III.49) a deer-trapper and consequently of low caste became rich by trade and was a great friend of the local Setti or guildman (See also Jatakas, II, 319-20; IV, 38; VI, 348).

A Mahasetti is called a Rajavallabha in the Suci Jataka. He was a millionaire and was much actuated by generous impulses. He was charitable and made large endowments to religious shrines and gave liberal gifts for pious purposes. It is said that Anandapindika, a millionaire of Kosala presented to the Buddha a public park Jetavana in Sravasti, and the ceremony in connection with this function was attended by as many as five hundred settis (Jataka I.93). Anandapindika is not a single name of the capitalistic Mahasetti. Mrgadhara and Yasa were other Mahasettis who were worth many crores and were influential citizens of ancient India. We similarly hear of a Jain Ananda giving away as gift the Karle cave, the finest monument of all India. The Mahasetti was also a title of distinction conferred by the state on worthy citizens. If we are to believe the Jatakas (I.122), it was a title possibly held during life. For this Jataka entitled Chulla Setti Jataka bears testimony to the fact that this Chulla Setti of Benares held this title during his life and after his death the title passed on to his son-in-law. Among other honours which were conferred on these Mahasettis one was to hold the umbrella

of state (setti chette) (C.I.II., I, p. 208). What exactly this distinction meant we cannot say at this stretch of time. It may be that on important public occasions the Setti was allowed the use of royal umbrella, being an ensign of the sovereignty or he was appointed to hold the umbrella in connection with the state functions.

The Vinaya texts and other literary evidences speak of an Anusetti, literally an assistant to the Setti (I. 19; Jataka V. 384). Apparently the duties of the Setti or Mahasetti were so onerous that he wanted an assistant to look to all of them carefully and efficiently. The Anusetti may correspond to an Assistant Secretary of a modern department, while the Uttarasetti may be a Joint Secretary. The nature of the functions relating to the Uttarasetti is not clearly defined.

Passing on from the age of the Jatakas to the Kushan period, we find that the Vanika was different from the artisan classes and even caravan traders. The Vanika was an industrial partner and a banker of repute. was in charge of trade and commerce, national and international. He contributed to the charitable establishments and erected huge edifices like caves for residence by pious men of all religions. At this time, the trade guild went by the name Sreni as also in the early period. And the head of the guild was Sresthin, a banker par excellence. (Ep. Ind. I, pp. 38 and 43; Ep. Ind. XXI, p. 55). The Vanik was officially recognised, and he was also known as Srenimukhya. If we proceed to examine the Gupta and the post-Gupta epochs we note that trade continued to be active and manifold and well regulated. Some of the members of the mercantile community enjoyed places of privilege as also patronage of kings.

Some of them were officials in charge of royal merchandise while others plied their private trade. The corporate activity of traders is more and more in evidence.

While this was the state of affairs in North India, it would be interesting to turn to South India and pass in review the role the merchants community of Tamilakam played. For this the Sangam works are primarily the sources of information. A Jataka (480) refers to the flourishing Tamil country and the international mart in that country Kavirippumpattinam, otherwise known as Puhar at the mouth of the river Kaveri. The merchants were the most influential community in this city. Commerce by land and commerce by sea were their profession. The wealth of the merchant classes surpassed the wealth of the ruling chieftains. Λ lot of foreign merchants were always seen in the city transacting business. There was no article of merchandise which could not find a place in the Puhar market. It is perhaps the Khaberis Emporium mentioned by Ptolemy. Manaikan, the father of Kannaki, and Masattuvan, the father of Kovalan, were the typical representatives of the Tamil merchant classes. had heaps of wealth and were very liberal in gifts. They enjoyed the foremost aristocratic rank in the social scale. It is said later in the Silappadikaram that if the merchants of Madura, the Pandyan capital, only came to hear of the name of Kovalan's father, they would accord him a fitting welcome as befitted his rank and status. Such was the high position held and enjoyed by the merchant princes of Puhar and of all Tamil nad. Equally famous were Madura, Musiris, Tondi and Karur

as centres of a prosperous international trade. Trade, industry and commerce were in the hands of these merchant classes, whose alliance was sought by the ruling chieftain. The latter befriended by conferring titles on them. Etti was one such title (Silappadikaram XV. 1. 163). We hear of an Etti Sangaman, a flourishing merchant at Madura Ibid. 1. 196), and an Etti Sayalan. (See also Manimekalai, IV, 1. 58; Perumkadai Bk. I, Ch. 40, 1. 116).

Though the economic heart of South India was sound under the Pallava rule, we have not much material to show the concerted action of traders and merchants. But in the days of the great Cholas we have mercantile groups such as Valanjiyar of Tiruppurambiyam (71 of 1897 ARE) and Manigramam of Adittapura (Ibid. 33 of 1895). While ur and sabha were assemblies of the village, Nagaram was the local assembly of mercantile towns (ARE 82 of 1906). It sometimes stands for an occupational group like Salivanagarattom (Ibid. 268 of 1921). The Nagaram of the Cholas was a guild of merchants, primarily devoted to mercantile interests, These guilds endowed charitable trusts as for instance in Salem (47 of 1888 ARE). Some inscriptions refer to Dharmavaniyar who paid contributions for founding and maintaining mutts and for festivals connected with temples (ARE 547 of 1902; 28 of 1927). In this connection an inscription from Anbil (1235 A.D.) mentions among others the presence of Chettis of different nadus and Davanachettis (Ibid. 601 of 1902). Overseas trade was equally flourishing in the period especially with China, Sumatra and other Islands.

The Settis (Tamil Chettis, Chettiyar) figured very prominently in the history of the Karnataka, Telugu and Tamil areas, in the post-Chola period also. There were many sub-communities among them of whom mention may be made of the Gavaregas, Gatrigas, Chettis, Chettiguttas, Ankakaras, Biras, Biravanigas, Gandigas, Gavundas and Gavundasvamis, Behris, Komatis, Gavaras, etc. The proportion of the merchant communities to the total population in the country was very great according to Paes the Portuguese chronicler who visited the Vijayanagar empire during the days of the emperor Krishnadevaraya.

Many of them engaged themselves in foreign trade. The Harivilasam of Srinatha, the Telugu poet of the 15th century, dedicated to the merchant prince Avaci Tippaya Chetti of Simhavikrama pattana (Nellore) throws welcome light on the foreign trade carried on by him. According to this work Tippaya Chetti and his brothers Tirumala Chetti and Cami Chetti imported both by sea and land such valuable articles as camphor plants from the Panjab, gold (plate or dust) from Jalanogi (?), elephants from Ceylon, good horses from Hummanji (Ormuz), musk from Goa, pearls from Apaga (sea), Kasturikatakam from Ootangi and fine silks from China. and supplied them to the courts of Harihara of Vijavanagar, Firoz Shah Bahmani and the Gajapati ruler of Orissa. Further they enjoyed the monopoly of supplying all the necessary articles for the grand spring festival (vasantotsava) celebrated by Kumaragiri, the Reddi king of Kondavidu. (S. K. Aiyangar, Sources of Vijayanagar History, p. 57).

The Chettis about whom we hear in the Karnataka, Tamil and Telugu areas of South India did business also in the west coast of South India. Barbosa a traveller who visited South India in the sixteenth century has left a remarkable account of this community. He says: "The more part of them (Chettis) are great merchants, and they deal in precious stones, seed pearls and corals and other valuable goods, such as gold and silver, either coined or to be coined. This is their principal trade and they follow it because they can raise or lower the prices of such things many times; they are rich and respected; they lead a clean life, and have spacious houses in their own appointed streets They go naked from the waist up, and below gather round long garments many yards in length, little turbans on their heads and long hair gathered under the turban. Their beards are shaven and they wear finger marks of ashes mixed with sandal wood and saffron on their breasts, foreheads and shoulders. They have wide holes in their ears into which an egg would fit, which are filled with gold with many precious stones; they wear many rings on their fingers, they are girt about with girdles of gold and jewellery and ever carry in their breasts great pouches in which they keep scales and weights of their gold and silver coins and precious stones..... Their sons also begin to carry them as soon as they are ten years of age, they go about changing small coins. They are great clerks, and reckon all their sums on their fingers. They are given to usury, so much so that one brother will not lend to another a ceitil (a very small Portuguese coin of copper which took the place of the dinheiro in the reign of Joao) without making a profit thereby. They are sober and

orderly in eating and spending. They speak a tongue which differs from that of Malabar as it is with the Castalians and Portuguese." (Barbosa, Dames, II, pp. 71-73).

Again referring to them the same traveller observes: "The more part of all the heathen merchants or chatis who live throughout India are natives of this country and are very cunning in every kind of traffic in goods" (Ibid. II, pp. 125-26). Mahuan the Chinese traveller who visited South India towards the close of the fifteenth century also observes that the Chettis were the principal trading community in the country and says that they bought pepper from the farmers when it was ripe and sold it to foreign ships when they passed by, and that they also bought and collected precious stones and other costly wares (JRAS, 1896, p. 344). That they settled in the eastern countries like the Archipelago for commercial purposes is evident from Barbosa who notes that there were in Malacca Chetige merchants from the Coromandel coast" (Barbosa, Dames, II, p. 177).

Of equal importance as the Chettis in the commercial life of the country, particularly in the Kanarese and Telugu districts, were the Komatis. A prominent division among them were the Gavaras to whom reference is frequently made in the Kanarese epigraphs. (See also Methwold, Relations of Golconda in the Early Seventeenth Century, pp. 15-17).

The Banias were another trading community of South India. They were perhaps the Abraiaman of

Marco Polo. He says: "These Abraiaman¹ are the best merchants in the world, and the most truthful, for they would not tell a lie for anything on earth. (If a foreign merchant applies to them and entrusts his goods to them they will take charge of these, and sell them in the most loyal manner, seeking zealously the profit of the foreigner and asking no commission except what he pleases to bestow). They eat no flesh, and armk no wine, and live a life of great chastity, having intercourse with no women except with their wives; nor would they on any account take what belongs to another; so their law commands. And they are all distinguished by wearing a thread of cotton over one shoulder and tied under the other arm so that it crosses the breast and the back

"These Abraiaman are Idolators; and they pay greater heed to signs and omens than any people that exists."

A very noticeable feature of the commercial life of South India was the organisation of the merchants into guilds, particularly those trading in the urban areas. The guilds had in a majority of cases their origin in a community of interest which the dealers in a particular commodity or a group of commodities had. It may be noted here that there were two kinds of guilds, the craft guilds and the merchant guilds; while the former was a professional guild based largely on the caste system, the latter was mainly a body of merchants doing business in a particular commodity or group of commodities irrespective of their caste. Sir George Birdwood truly

¹ Professor K. A. Nilakanta Sastri takes the view that these were Brahmans. (Foreign Notices of South India p. 176).

remarks: "Sometimes the same trade is pursued by men of different castes and its guild generally includes every member of the trade it represents without strict reference to caste." (Industrial Arts of India, p. 138).

There appear to have been many merchant guilds in the country which were known by such names as Banajigas, the Valanjiyar of the eighteen countries, the nadu, the nagarat, the Vaisyavaniyanagarattar, the nagarattar, etc. A remarkable tendency of these guilds was to trace their descent from great personages of legendary fame such as Kubera and to claim that they were Vaisyas in caste. The Chetti merchants particularly professed to belong to different gotras such as Puccakola gotra, Yerasetti gotra, Bodarukuta gotra, Venukula gotra, Yanukula gotra, Vivarisitla gotra and Appanangakula gotra. (ARE 447-453 of 1915; *Ibid.* 1916, para 82).

The Vira Banajigas constituted a powerful mercantile corporation in the Karnataka districts. It appears they were not different from the modern Banyas. Dr. Barnett referring to them says: "There was a vast organisation of associated traders which about the twelfth and thirteenth centuries had spread a network over the greater part of southern India and Ceylon and perhaps even further, and which beginning with simple commerce and then developing an elaborate social and semi-military system strikingly recalls our East India Company. These were the Vira Banajus as they were called in Kanarese and Vira Valanjiyar as they were styled in Tamil. The name signifies 'valiant merchants,' and is therefore similar to our 'Gentlemen Adventures'....' They claimed to have come originally from Ahicchatra,

but their central body was at Ayyavole, the modern Aihole which was the seat of their Board of Directors consisting of a council of 500 members. (See B. A. Saletore, Social and Political Life in the Vijayanagar empire, Vol. II, p. 98 n.). But Dr. Fleet thinks that "Balanja is another form of Bananju or Bananja, the modern Bananjiga or Banijiga which must be the original of or a corruption of the Sanskrit Vanija, Vanijika, merchant or trader." They took such highsounding titles as nakhariparivara and mummuridanda. The Vira Banajigas appear to have been Lingayats.

As has been already said the guilds were also known as Nagarattar² or Chettis, though the latter term denoted simply a merchant in the Telugu districts. These guilds had each a leader who controlled the working of the organisation, and was known in the Telugu and Kanarese districts as the Pattanasvami or more simply Chetti. There is no manner of knowing how they were made the leaders of their respective guilds, either by election or recognition (and in some cases they were appointed by the Government), but there is no reason to doubt that they exercised much influence in the administration of the country, and in a majority of cases were in charge of the municipal administration in their respective

² Both in South India and North India, a distinction was made of Settis in towns as compared with Settis in the rural parts. The Nigrodha Jataka (445) refers to the Settis of the Janapada or the country parts. Apparently the Janapada Settis held a lower status and were in charge of rural trade and commerce which were generally of the nature of barter and simple economy. The Settis of the town were apparently the Nagarattar who represented the city's trade and commerce. These were great financiers and bankers who advanced loans to the state and helped the state in the smooth working and economic advancement.

localities. The Pattanasvami or Prthivi Chetti commanded great respect event outside their jurisdiction; and according to an epigraph a particular Pattanasvami was presented with betel leaf and given dress and allowance of food by the government wherever he went as also the customs dues 'on the roads both ways' (E.C. xii, CK. 76).

There was another dignitary connected with the guild and was known as vaddavyavahari or vaddavyapari or at times as mahamukhyavadda vyavahari usually translated as senior merchant or merchant prince. But in our present state of knowledge it is not possible to say what exactly his duties were or in what relationship his office stood to that of the Pattanasvami if it was different from the latter. Usually these officers were connected with the institutions and organisation of fairs for which they were granted lands. An equally important dignitary in the local areas was the Prabhu or the Mahaprabhu usually associated with the guild. Perhaps a person could hold the offices of both the Mahavadda Vyavahari and the Mahaprabhu.

These guilds exercised powerful influence over the government; and it was not unusual for the government to seek their approval for their policy, particularly with regard to taxation (681 of 1922, Rep. 1923, para 83; See T. V. Mahalingam, Administration and Social Life under Vijayanagar, pp. 223-24). An officer under Achyuta Raya made a grant of some duties on crops and of the fee on marriages with the consent of the nanadesimerchants also Ibid. The guilds could levy local taxes within the area under their jurisdiction, perhaps without any reference to sanction from the government.

The guilds enjoyed the privilege of conferring honours on persons of position and dignity, even on government officials. Towards the close of the fourteenth century we hear that the members of the nakara parivara and mummuridanda 'together with their three hundred Billa dependents and with the collection of the Holeyas of Vijayanagar having placed the diamond Vaisanige in the presence of the holy lotus feed of God Virupaksha and sitting down, having agreed among themselves conferred the mayoralty of the earth (prthvisettitana) on Muddayya Dannayaka who was the officer for the superintendence of the customs of our fifty-six countries." (E.C. V. Bl. 75): They also enjoyed the right to make regulations of a social character for their own members. A number of Chettis at Bagur made for instance some regulations in 1449 A.D. (?) regarding the women who lapsed from marriage.

In the closing years of the Vijayanagar history again the Chettis played a notable part in the commercial life of the country. They were also a factor to reckon with during the period of the establishment of trade settlements by the European powers in South India. The Dutch carried on their commercial transactions with those occupied in the textiles of the country through one Mallai or Mallaya Chetti alias Cinnaia or Cenanan Chetti. This merchant prince had many dependents under him of whom was one Seshadri Chetti of Porto Novo who in course of time rose to the position of the chief Indian merchant of Madras. (See C. S. Srinivasachari, A History of Madras, pp. 30-37). Several members of the community were Dubashes to the East India Company and later under the Crown up to the present day they are

taking active interest in the promotion of trade and commerce. Their services in the fields of trade, industry, commerce and banking have won the due recognition of the Government and the public as well, while the modern Chambers of Commerce have taken the place of ancient and mediaeval guilds.

BADARAYANA AND THE PANCARATRA

By

PANDIT K. SRINIVASACHARYA

All commentators, with the exception of Anandatirtha and Nimbarka,1 agree in thinking that in the last four sutras of the second pada of the second adhyaya of the Vedanta-sutra, Badarayana discusses the question of the orthodoxy of the Pancaratra system, otherwise known as the Bhagavata or the Satvata school. Samkara and Ramanuja hold diametrically opposite views regarding the Sutrakara's attitude to that system. The former claims that Badarayana condemns it like the systems previously examined; but the latter thinks that he approves of it. According to Samkara the four sutras set forth four objections against the Pancaratra; but, according to Ramanuja, the first two sutras state the prima facie case against the system, while the next two meet the objections and prove its authoritativeness. Their interpretations of the first two sutras present substantial agreement, the divergence arising only in their comments on the next two aphorisms.

Conscious of the fact that, in the interests of his system, he is forced to take up here an indefensible position, Samkara finds it necessary to preface his comments on these sutras with the following remarks:—Unlike the several heterodox darsanas whose views have just been criticised in the second pada, the Bhagavata system considers Brahman or Vasudeva as being at once the material and the efficient cause of the world, a theory

¹ Anandatirtha and Nimbarka believe that this adhikarana is devoted to a refutation of the Sakta Tantra.

acceptable to the Vedantins. Again, the Bhagavata doctrine that the Highest self, Vasudeva takes on the fourfold forms of Vasudeva, Samkarshana, Pradyumna and Aniruddha is in perfect accord with the scripture. And so is the Bhagavata teaching prescribing an austere life devoted to the worship of the Lord in five different ways, known as abhigamana, upadana, ijya, svadhyaya and yoga. The Pancaratra is on firm ground with regard to these fundamental tenets. None of these is to be controverted. We must, however, take exception to the doctrine that from Vasudeva, the highest Brahman and the universal cause, the individual soul called Samkarshana originates; that from Samkarshana the internal organ termed Pradyumna takes birth; and that from Pradyumna proceeds the principle of egoity or individuality termed Aniruddha. For this theory implies that finite souls originate, a doctrine contrary to the Vedantic teaching.

Briefly stated, Samkara's comments on the four sutras are as follows:—The Pancaratra is lacking in validity, (1) because it speaks of the creation of the soul, whereas it is eternal and uncreated;² (2) because it teaches that the instrument, viz., manas proceeds from an agent, viz., the soul, a theory which fails to find support in everyday observation or in scripture. (3) Or, if Vasudeva, Samkarshana, Pradyumna and Aniruddha are taken as Brahman, the ultimate cause, the objection already raised, namely, the impossibility of origination would remain unanswered. For either the four Vyuhas

2. न जायते ब्रियते वा विपश्चित् —कठोपनिषत् II. 18 नात्मा श्रुतेर्नित्यत्वाच्च ताभ्यः.— ब्र स्. II iii 81

denote four distinct individuals equally omniscient, omnipotent and so forth or they signify four similar bodies assumed by an identical person; and in any case their origination would be unintelligible. The first alternative needlessly multiplies the deites; and it is particularly repugnant to the Bhagavatas who strictly adhere to the belief in a single supreme Lord. The second alternative does not fare better; for the four bodies are, by hypothesis, all alike and what is considered the effect exhibits no novel features and hence, the chain of causation is purposeless. Further, there is no reason why the number of forms that Vasudeva takes should arbitrarily be limited to four. In fact, the whole world from Brahma down to a blade of grass is His manifestation. (4) Moreover, the Pancaratra presents mutual contradictions. For example, sometimes jnana (knowledge), aisvarya (lordship) and the like are referred to as attributes (guna), and sometimes they are spoken of as substances (guni). Not only that; the Pancaratra Agamas even speak disparagingly of the Veda. It is said that Sandilya, not finding the highest bliss in the Vedas, turned to the study of the Pancaratra. Hence, it is to be rejected.

This interpretation is elaborately criticised by Yamunacarya in the Agamapramanya, a work devoted to the vindication of the orthodoxy of the Pancaratra system. The Visistadvaitic position is further presented in the Sri-Bhasya in a succinct form. On this view, the third and the fourth sutras would mean (3) If Samkarshana, Pradyumna and Aniruddha are no other than the highest Brahman, there could be no objection to the Pancaratra. (4) The Pancaratra explicitly denies the fact of souls having an origin. And with the removal of the only objection that could be raised against the

system, the Pancaratra can hardly be discredited as subscribing to erroneous doctrines. Samkara himself virtually admits this in the third sutra.

To explain the matter a little more in detail—In reply to the difficulty raised in the first two sutras, it is urged that Samkarshana, Pradyumna and Aniruddha denote only the highest Brahman and not the individual souls, manas and individuality. It is only the person who is imperfectly acquainted with the Bhagavata system who will assert that it speaks of souls as having an origin. All that it says is that Vasudeva, out of his infinite mercy, takes on four forms to render Himself accessible to His devotees. The purpose of these manifestations is the same as that of the Avatars generally. The scripture declares: "though unborn He assumes manifold forms."

The question now to be decided is: Which of these two interpretations is the right one? The sutra in whose interpretation there is the greatest measure of divergence is the third. Vijnanadi bhave va tadapratishedhah. Literally translated, it runs as follows:—"Or, on account of their being knowledge and ultimate cause, there is non-contradiction of that." As expanded by Samkara it reads:—"Or, if they (i.e., Samkarshana and the rest) are to be taken as Brahman and not as the soul, manas and egoity, still there is non-contradiction of that (i.e., there is non-contradiction of the objection already raised against the Bhagavata system, viz., the impossibility of origination)."

3. अजायमानो बहुधा विजायते

According to Ramanuja the sutra means: "Or, on account of (their) being Brahman, there is non-contradiction of that (i.e., Pancaratra is uncontradicted)." The word 'tat means for Samkara' the difficulty pointed out at the outset.' Ramanuja takes it to mean Pancaratra. On Ramanuja's interpretation, the first part of this sutra states an antecedent; and the second part, its consequent. But on Samkara's view, it means that the difficulty with regard to the origin of the jiva may be got over; but that the difficulty of the origin of the vyuhas would have taken its place and that, in any case, the objection of the impossibility of origination would remain unanswered. Clearly, this is far-fetched. It is not quite satisfactory to say that one part of the sutra refutes the objection already raised, while the other part states a fresh difficulty. Such an interpretation would be justified only if the sutra were really two.

The particle "va (बा) occurring in the third sutra of this adhikarana is a clear indication of a change of side in the argument. Numerous examples may be cited both from the Purva-Mimamsa and the Vedanta sutras to show that the particle 'va' with or without the negative particle 'na' (ब), is used to denote such a change. As Thibaut says ".... it however appears to me that the explanations of 'va' and of the 'tat' implied in Ramanuja's comment, are more natural than those resulting from Samkara's interpretation."

4. एकं वा संयोगरूपचोदनाख्याविशेषात् (II iv 9); नाना वा देवतापृथत्त्वात् विधिर्वा संयोगान्तरात् (III iv 19) न वा विशेषात् (ब्र सू III iii 2); न वा तत्सहभावाश्रुतेः (ब्र सू III iii 68); पूर्वववद्वा (ब्र सू III ii 28); Further, having accepted at the outset in unequivocal terms the theory of the Vyuhas, Samkara's condemnation of the selfsame theory exhibits a clean volteface.

Samkara interprets the last sutra to mean that since the Pancaratra talks lightly of the Veda, it is unvedic. But this is based on a misunderstanding. The text declaring that Sandilya found no lasting bliss in the veda and turned to the study of the Pancaratra does not intend to decry the Veda. It aims at extolling the Pancaratra. Take an analogous case. In the Bhuma-vidya, Narada says that with all his study of the Vedas, Itihasas and Puranas, he knew only the mantras but did not know the self. Obviously the statement that the knowledge of the self is not attainable by any means except the knowledge of the Bhuman aims at glorifying this latter knowledge.

Vacaspati-misra in his *Bhamati* identifies the teaching of Oudulomi with the Pancaratra⁶ and explicitly asserts that according to the Pancaratra system the jiva is without an origin.⁷ In the face of this, how can it be argued that the Pancaratra is devoid of authority, as it speaks of the origination of souls?

- 5 Sacred Books of the East, Vol. xxxiv, p. lii.
- 6 It is not known on what authority this identification is made. Compare Ranga Ramanuja's Bhavaprakasika a commentary on Srutaprakasika, II, iv, 21.

इति पाञ्चरालमतमस्मिन् सूत्रे उपन्यस्यत इति यद्वाचस्पतिनोक्तं न तत्न म्लं पश्यामः॥

7. यथाहुः पाञ्चरात्रिकाः—
आमुक्तेर्भेद एव स्याज्जीवस्य च परस्य च।
मुक्तस्य तु न भेदोऽस्ति भेदहेतोरभावतः॥ (भामती)।
सर्वदेत्यनादिकाले-कल्पतरुः।

Amalananda, the author of *Kalpataru*, says that the cardinal doctrines of the Pancaratra are sound and are even entitled to respect, but that it appears to differ from the Vedantic teaching only in one respect, namely its reference to the origin of souls. And even here the Pancaratra does not really intend to teach that souls originate. Like the upanishadic texts speaking of souls as originating, the Pancaratra text must be taken in a secondary sense.8 Samkara himself has admitted in his comment on II, III, 17 that the scriptural passages referring to the birth of souls must be understood figuratively as standing for association with new bodies. Commenting on the third sutra, the Vrttikara, who was, according to one tradition, a direct disciple of Samkara, says, "If the terms Samkarshana and the rest denote Brahman, then we do not refute the Pancaratra, in fact, it would be the same as our system."9

If the Pancaratra system were unquestionably orthodox, why, it may be asked, should it be discussed in the company of philosophies whose heretical nature is exposed? As Ramanuja pertinently remarks, having confuted the Pasupata Agama, the Sutrakara has necessarily to dispel the doubt the Pancaratra also may, in so far as it belongs to the class of agamas, be lacking in force. To establish that the Pancaratra stands on an

- 8. बुध्दिपूर्वकृतिः पच्चरात्रं निश्वसितं श्रुतिः। तेन जीवजनिस्तत्र सिद्धा गौणो नियम्यते॥
- 9. जीवानां विज्ञानानन्दरूपत्व.... मङ्गीक्रियत इति चेत्तर्हि तदप्रतिषेधः, तस्य मतस्य प्रतिषेधः निरासः अस्माभिर्न क्रियते

Sutra-Vrtti Ed. by Mahamahopadhyaya Harihara Sastri. Sri Vidya Press, Kumbakonam, p. 41.

altogether different footing, the Sutrakara has per force to discuss the nature of the Pancaratra. A discussion on the Pancaratra will not cut into the general scheme of this section, because the opponent (pratyarthi) here is not the follower of the system, but he who believes in its heretical character. Or, as Vedanta Desika puts it, the second pada of the second adhyaya, whose object is to show that certain darsanas are not rivals to Vedantic thought, first points out that systems such as the Sankhya, the Bauddha and the Jaina are not worthy rivals since they are backed by unsound logic and then establishes that the Pancaratra cannot be reckoned a rival, for the simple reason that it is in fundamental agreement with Vedantic teaching.10 ".... it would not be unnatural", says Thibaut, "to close the polemical pada with a defence of that doctrine which in spite of objections has to be viewed as a true one ".11

It is difficult to reconcile oneself to the thought that Badarayana condemned the Pancaratra doctrine in the *Vedanta-sutra* but extolled its greatness in the *Moksa-dharma* and elsewhere in his *Mahabharata*. Even if the identity of Badarayana with Vyasa were to be disputed, there is no gainsaying the fact that Badarayana subscribes to the views expressed in the *Mahabharata*. For he frequently cites passages from that work in support of his views.

10. प्रामाण्यं कर्मकाण्डस्मृतिनयवशत स्सात्वतस्यापि सिद्धं पादेऽस्मिन्सङ्गतिश्च प्रतिमतदमने नास्त्यमुण्येति चेन्न । प्रत्यिथत्वं विरोधभ्रममपनयता पाञ्चरात्रस्य वार्यं दुस्तर्का ग्रुत्थितोत्तया- तदितरसमयेष्वित्यनुस्यूतसिद्धिःः ॥ अधिकरणसारावस्री. II ii 35

LIGHTNING

By

N. S. Subba Rao, M.A.

The age in which we are living has been called an age of electricity. Large amounts of electrical energy are generated at various parts of the world and put to all imaginable uses. In fact, we might say without much exaggeration, that there is no type of mechanical work to-day which cannot be carried out cheaply and more efficiently with the aid of electricity.

Although the large-scale harnessing of electric power is of recent origin, our planet has almost from its birth been endowed with immense sources of electric energy. This energy often displays itself during thunderstorm, in those luminous discharges in the atmosphere, known as lightning. The awe-inspiring character of these displays made people look upon the thunderclouds 'as the arsenal in which God keeps His artillery of thunder and lightning, at times to strike the children of men with reverential awe, or to inflict on them some great punishment.'

It is therefore not surprising that no systematic study of lightning was made till very recently. In 1752, Benjamin Franklin carried out his famous experiment with a kite at Philadelphia and demonstrated that electric charges and sparks could be drawn from thunderclouds and that these charges exhibited the same properties as similar charges obtained by artificial means in the laboratory. We now know that lightning is the visible manifestation of the passage of electricity either between two thunderclouds or between a thundercloud

altogether different footing, the Sutrakara has per force to discuss the nature of the Pancaratra. A discussion on the Pancaratra will not cut into the general scheme of this section, because the opponent (pratyarthi) here is not the follower of the system, but he who believes in its heretical character. Or, as Vedanta Desika puts it, the second pada of the second adhyaya, whose object is to show that certain darsanas are not rivals to Vedantic thought, first points out that systems such as the Sankhya, the Bauddha and the Jaina are not worthy rivals since they are backed by unsound logic and then establishes that the Pancaratra cannot be reckoned a rival, for the simple reason that it is in fundamental agreement with Vedantic teaching.10 ".... it would not be unnatural", says Thibaut, "to close the polemical pada with a defence of that doctrine which in spite of objections has to be viewed as a true one ".11

It is difficult to reconcile oneself to the thought that Badarayana condemned the Pancaratra doctrine in the *Vedanta-sutra* but extolled its greatness in the *Moksa-dharma* and elsewhere in his *Mahabharata*. Even if the identity of Badarayana with Vyasa were to be disputed, there is no gainsaying the fact that Badarayana subscribes to the views expressed in the *Mahabharata*. For he frequently cites passages from that work in support of his views.

10. प्रामाण्यं कर्मकाण्डस्मृतिनयवशत स्सात्वतस्यापि सिद्धं पादेऽस्मिन्सङ्गतिश्च प्रतिमतदमने नास्त्यमुष्येति चेन्न । प्रत्यिथतं विरोधभ्रममपनयता पाञ्चरात्रस्य वार्यं दुस्तर्काद्युत्थितोत्तया- तदितरसमयेष्वित्यनुस्यूतसिद्धिःः ॥ अधिकरणसारावलीः ॥ ii 35

LIGHTNING

By

N. S. Subba Rao, M.A.

The age in which we are living has been called an age of electricity. Large amounts of electrical energy are generated at various parts of the world and put to all imaginable uses. In fact, we might say without much exaggeration, that there is no type of mechanical work to-day which cannot be carried out cheaply and more efficiently with the aid of electricity.

Although the large-scale harnessing of electric power is of recent origin, our planet has almost from its birth been endowed with immense sources of electric energy. This energy often displays itself during thunderstorm, in those luminous discharges in the atmosphere, known as lightning. The awe-inspiring character of these displays made people look upon the thunderclouds 'as the arsenal in which God keeps His artillery of thunder and lightning, at times to strike the children of men with reverential awe, or to inflict on them some great punishment.'

It is therefore not surprising that no systematic study of lightning was made till very recently. In 1752, Benjamin Franklin carried out his famous experiment with a kite at Philadelphia and demonstrated that electric charges and sparks could be drawn from thunderclouds and that these charges exhibited the same properties as similar charges obtained by artificial means in the laboratory. We now know that lightning is the visible manifestation of the passage of electricity either between two thunderclouds or between a thundercloud

and earth. The electricity in the thundercloud is static or immobile until such time when it is set in motion during the lightning flash, unlike the current (or dynamic) electricity with which we are very familiar.

A thorough investigation of lightning in its various aspects has been carried out by Schonland, Malan, Collens and others, under the direction of the Lightning Research Committee of the South African Institute of Electrical During these researches several hundreds of lightning flashes were photographed with the aid of a special camera known as the Boys Camera. The camera consisted of a fixed plate and two lenses revolving in a circle in front of it at the ends of a diameter. The lenses had a focal length of 15 cm. and were mounted with their centres at a distance of 10·1 cm. apart. The lens system was rotated by hand at a speed of 1500 revolutions per minute. With the aid of these photographs it was possible to detect the occurrence of a number of individual discharges in the same discharge channel separated from each other by exceedingly short intervals of time and to measure their velocities. These photographs were supplemented by those taken on an ordinary These photographs showed the flash in its relation to the neighbouring objects and helped to locate the region in which the flash occurred. A slow moving camera, with only a single rotating lens instead of the two lenses in the Boys Camera, was also employed. made one revolution for every 59 revolutions of the Boys double lens camera. As the cameras have to be kept open for some time before a discharge occurs they must be worked in the country away from the glare of cities. The fixed camera helps to fix the position of the flash, the slow camera gives the order of occurrence of the individual flashes and the fast Boys camera separates the components of a flash and reveals what may be described as its fine structure.

Lightning flashes are of two kinds, consisting of discharges between one cloud and another or between a cloud and the earth. In general it was noticed that there were 2 or 3 intercloud discharges before one to the ground. A few cases where the discharge occurred without previous intercloud discharges have also been observed. In such cases the discharges to ground have been found to be very frequent and violent.

Every lightning flash is composite in character, the number of component strokes being variable ranging from 1 to 6. The component strokes are separated from each other by intervals of about 001 to 0.53 second, the most frequent interval being 0.03 second. Schonland showed that single strokes are most frequent and that those with more than six components are rare. The origin of the separate strokes appears to be due to the existence of separate generating centres at different parts of the cloud. Quite a large number of discharge channels have been found to be Y shaped. These arise from separate generating centres in a cloud and have a common stem formed by one stroke and utilised by the other.

Each of these component strokes is itself double, consisting firstly of a leader stroke from cloud to ground quickly followed by an intense and fast moving main stroke. The leader stroke is of two kinds, stepped or dartlike, the stepped leader being more common. The leader stroke advances forward for a distance of about

50 metres, appears to pause for a while (50-90 microseconds) and advances another 50 metres and so on until it reaches the ground. The leader stroke thus establishes in a series of steps a conducting channel between cloud and earth, and enables the return or the main stroke to travel at a very fast rate from the earth to the cloud. The dart leader appears to take a direct path to earth in one step and it is believed that it may be using a channel previously prepared by a stepped leader too feeble to be photographed.

The leader stroke is heavily branched, the direction of branching indicating its direction of travel. The main stroke follows in every detail the path traced out by the leader stroke. After every one of the branching points the intensity of the discharge appears to be reduced.

The nature of the stepped leader is explained on the assumption of a slow moving negative pilot streamer which advances into virgin air with velocities of 1.0×10^7 to 2.0×10^8 cm. second and provides an ionised channel along which the stepped leader travels. The stepped leader travels much faster, with velocities varying from 1.3×10^8 to 3.2×10^9 cm. second and catches up the tip of the pilot steamer. Then there is a pause till a further ionised path is prepared by the pilot for the advance of the stepped leader. This explanation is supported by the fact that the ratio of the length of the path travelled by a stepped leader, to the time of pause, is a constant and is equal to the velocity of the pilot steamer.

Estimates of the various quantities involved in the discharge process were made from a study of the photographs taken with the cameras already described. The

photographic study was later supplemented by electrical studies of the discharge process. It is interesting to observe that the study of the development of the spark discharge in the laboratory, carried out by Allibone and Meek, showed characteristics similar to those of the lightning flash.

The calculation of the total amount of electrical energy expended over the surface of the globe in the form of these lightning flashes gives astounding figures. The average quantity of electricity carried by a lightning discharge is 20 coulombs. This means that the average current must be of the order of 20,000 amperes. Each flash as a rule discharges a cloud completely and it is known that an active cloud produces one flash every 20 seconds. The thundercloud may thus be looked upon as a huge electrical machine which expends 2 or 3 million kilowatts continuously during its hour or two of activity.

From data collected by Brookes from various parts of the globe, it is known that the earth experiences 16,000,000 thunderstorms per annum or 44,000 per day. This means that at any instant there are on the average 1800 thunderstorms in progress at different parts of this world or that 100 lightning flashes occur every second. Over the earth therefore thunderstorms are continuously expending energy at the rate of 4×10^9 kilowatts. This huge figure is likely to tempt scientists to device a method of tapping even a small bit of this energy and to utilise it for the good of humanity. However tempting the prospect may seem, no such effort has proved successful.

This stupendous amount of energy is used up in several ways. Most of it is dissipated in the form of heat and the luminous effects observed are the result of the heating to incandescence of the lightning channel. A small portion of the energy is used up in the generation of Hertzian waves known as atmospherics. A study of lightning and its relationship to atmospherics has been made in great detail by several observers. Chief among them may be mentioned Watt, Appleton and Herd. The results of researches on atmospherics supplement the data on lightning referred to above, and in some cases provide information of great value which cannot be obtained by either visual observation or photographic registration.

It was very early (1926) established by Appleton, Watt and Herd that lightning discharges are capable of producing radiation fields similar in wave form and magnitude to those of atmospherics of distant origin. The above authors studied atmospherics with the aid of cathode ray oscillographs and concluded that the duration of atmospherics were of the order of a few milliseconds. Others employing a tuned wireless receiver and an Eithovan string galvanometer have given durations ranging between 0.2 and 0.5 second. Munro and Webster working with an aperiodic receiver and a cathode ray oscillograph, with a time base of the order of 0.1 second, pointed out that atmospherics really consist of a number of discrete pulses separated by clear intervals.

It was noticed by the author (1935) during experiments on atmospherics, carried out with the aid of a tuned receiver and a galvanometer of period of about 1 second, that certain thickenings or dots occurred in the trace of the galvanometer motion. The number of thickenings or dots indicate the number of separate impulses received by the galvanometer during a short interval. It was pointed out that the total duration of

atmospherics is about half a second and that these consist of a number of components, the fine structures of which can be revealed only with the aid of a cathode ray oscillograph.

All these observations on the structure of atmospherics may be correlated with the details of the structure of the lightning discharge and there is ample evidence to show that we must look to thunderstorms and their accompanying lightning discharges as important sources of atmospherics. Several attempts made to correlate the occurrence of atmospherics with the special type of meteorological conditions necessary for the building up of thunderstorms have yielded very valuable information. R. Bureau (1926) and others have concluded that atmospherics are the phenomena that give evidence best for the passing of a meteorological disturbance in tropical regions. The other meteorological variables give indication of the meteorological disturbance, when it has reached the observing station, while atmospherics announce it a few hours in advance.

Experiments were carried out by the author of this article (1940) with the aid of two receiving sets tuned to 400 metres and 40 metres respectively and two galvanometers of periods of about 2 seconds. Atmospherics were recorded for short intervals every hour throughout the day, over a period of nearly a year. It was found that sunset had a decided effect on atmospherics, an effect which may be aptly described as trigger action. The radiation from the sun exerts a restraining influence on thunderstorm activity, the occurrence of lightning and the generation of atmospherics. With the setting of the sun, the restraining influence is removed,

the trigger as it were is pulled, lightning flashes occur and the regular thunderstorm commences.

The investigations of Macky (1933) on the deformation and breaking up of water drops in strong electric fields point to the conclusion that inside a thundercloud, the splitting of the drops and the building up of high potentials are accompanied by small local sparks. These sparks are too feeble to be observed visually or with the aid of a camera. The author has pointed out that the occurrence of these sparks may be detected from a study of atmospherics on the short waves and that these give advance information regarding the existence of meteorological conditions in the atmosphere favourable for the building up of large thunder clouds. The work of the author has further shown that prolonged atmospheric activity on the short waves appears to be connected with the formation of meteorological depressions. The study of atmospherics therefore not only provides additional data on lightning but at the same time provides a new method of forecasting weather and the occurrence of meteorological depressions long before such formations are detected by the ordinary methods.

REFERENCES.

Allibone and Meek 1938 Proc. Roy. Soc. 166, 97-126.

Appleton, Watt and Herd 1926 Proc. Roy. Soc. A. 111, 615.

Bureau and others 1926 Jour. Roy. Met. Soc. 52, 198.

Macky 1933 Proc. Roy. Soc. A. 133, 565.

Malan and Collens 1937 Proc. Roy. Soc. 162, 175-203.

Schonland 1932: Atmospheric Electricity (Methuen).

Schonland 1938 Proc. Roy. Soc. 164, 132-150.

Schonland and Collens 1938 Proc. Roy. Soc. 143, 654-674.

Schonland, Hodges and Collens 1938 Proc. Roy. Soc. 166, 56-75.

Schonland, Malan and Collens 1935 Proc. Roy. Soc. 152, 595-625.

Schonland, Malan and Collens 1938 Proc. Roy. Soc. 168, 455-469.

Subba Rao 1935 Jour. Annamalai University, IV, 50. Subba Rao 1936 Nature 136, 653.

Subba Rao 1941 Proc. Ind. Acad. Sci. Vol. 14, No. 2.

OUR FOUNDER

By

PROF. P. A. SUBRAMANYA AIYAR, M.A.

The Rajah of Chettinad, the founder of the Annamalai University is a Nagarattar. The Nagarattars are a Tamil-speaking community living mainly in the Ramnad District and here and there in the Pudukottah State in the Presidency of Madras.

They are of the Vaisya caste, that caste to which the ancient Hindu law-giver assigned industry and commerce in his great scheme of division of labour. Engaged in commerce from time out of mind, they are keen business-men. The arithmetic of their book-keeping has astonished and puzzled the entire banking world. The rapidity and accuracy with which, without the help of pencil and paper, a ten year old brat among them can do an intricate sum in the calculation of interest can send expert Florentine "counter-casters" blushing.

But they are as soft-hearted philanthropists as practical business-men. In business itself can their philanthropy be discerned. A debtor among them, if any, never takes advantage of the law of limitation and never baulks the creditor of his money simply because the creditor forgot to sue him before the document became time-barred. But theirs is not merely this negative philanthropy. Brought up in an atmosphere of the true ancient Hindu dharma, they are trained experts in the art of giving away. The feeding of the poor and the building of temples have gone on for ages here with their money. And to-day they have added to

their already crowded programme-sheet of items of expenditure, the by-no-means-cheap item of founding and maintaining schools and colleges.

Rajah Sir Annamalai Chettiar of Chettinad founded the Annamalai University in June 1929. It was then, and has been so far, the only University in India that owes its existence to one man's charity. How long it will enjoy that proud distinction depends on how long the other Kuberas of the country take to be inspired by his example.

THE NUCLEUS OF THE UNIVERSITY.

The Annamalai University was not a sudden creation; it was a gradual growth. It developed out of a college affiliated to the Madras University.

The Sri Minakshi College, Chidambaram, was founded in 1920. Small as it was when started, only nine years old as it was when it gave place to the Annamalai University, it had a history of its own, not uninteresting and not without inspiration to true lovers and promoters of knowledge.

The country has known very well and will remember for ever the late Dewan Bahadur S. Rm. M. Rm. Ramaswami Chettiar, the junior of the two elder brothers of our Rajah Saheb. It was the name of this great and distinguished member of the Nagarattar community that was written in indelible characters in the Minutes Book of the Chidambaram Municipality in the year 1912 when at his own sole cost, he helped Chidambaram for ever to drinking water from the Coleroon. The Dewan Bahadur started in 1913 a High School at Chidambaram that men agreed in gratitude to call the Ramaswami

Chettiar Town High School. To him work in verity was Worship; and he wanted the High School to adopt that for its motto. Inscribed in bold capitals, on a piece of wood, the motto has hung any day these twenty-seven years at the threshold of the new school.

In less than half a dozen years after the foundation of the school, however, the philanthropist was, to the great ill fortune of eager scholars and indigent parents, gathered prematurely to his forbears. But Saraswati is an Immortal. And history shows that She is preparing to live the most vigorous life precisely when She seems most to languish. The Renaissance was preceded by what in European History is by common agreement called the Dark Ages. All the time the Dewan Bahadur was running his High School, the country was getting gradually acquainted with another member of the family at Chettinad who was in a few short years to make himself the contemporary Micaenas of our land.

Rajah Sir Annamalai Chettiar, then simple Mr. Annamalai Chettiar, was the youngest of the three brothers of whom the Dewan Bahadur was the second. Young at the time as he was, obscure certainly he was not. Already as early as the summer of 1915, his eager eye had discovered a golden chance for the exercise of his charity. They say that money burns in little boys' pockets, and spend it they must; wealth in the chests of these Nagarattars appears very much like money in little boys' pockets; at any rate, the particular Nagarattar gentleman of whom we are speaking, found it impossible to withhold charity in the presence of an object calling for charity. In 1915, after contributing handsomely to the hostels of the American College, at Madura, he came

forward with an offer to endow several lakhs of rupees on, and meet the entire cost of the management of, the Madura College, Madura, provided the entire management was transferred to the hands of a responsible committee of seven. And as an earnest of this offer he purchased land for thirty thousand rupees and put it at the disposal of the young men of the college for a play-ground. But as the proviso by which his offer was conditioned was, even after the lapse of five years, neither fulfilled nor seemed likely ever to be, Mr. Chettiar had to content himself with what he had done and to cast about once more for a fit recipient of his charity.

It was at this hour that it pleased fate to deprive Chidambaram of the great philanthropist, the Dewan Bahadur. But there is always a soul of goodness in things evil, and God fulfils himself in many ways. This event unhappy in the extreme to the public of Chidambaram, carried just some little consolation with itself in that it placed Mr. (then Rao Bahadur) Annamalai Chettiar immediately in charge of the tasks the Dewan Bahadur had undertaken. He became the manager of the infant High School at Chidambaram, and as the sequel showed, became its manager to some purpose.

It was in November 1918 that the management of the High School passed into the hands of the Rao Bahadur. On June 24, 1920, the Sri Minakshi College, Chidambaram, was an accomplished fact. That day Chidambaram (South Arcot, one should say) gained what Madura had lost.

The founder of the new college believes as firmly in modest beginnings as in earnest endeavours. The College was, to begin with, to be an Intermediate College—a second grade college in the language of South Indian academicians. And even as an Intermediate College, it was to offer instruction only in non-science subjects among the optional groups; for Physics, Chemistry, Botany and Zoology require apparatuses and laboratories which it takes time to get ready.

The College was affiliated to the Madras University. It was housed temporarily in the High School building; that, by the way, means that the High School had been erected on a scale calculated to afford room to such guests as the new college.

South India stood astonished at what was doing at Chidambaram; Mr. Littlehailes, then Director of Public Instruction, Madras (and afterwards Chief Commissioner for Education with the Government of India and later, Vice-Chancellor of the Madras University) officiated at the opening ceremony of the new institution. Thus came into being a small college, which, Heaven and good men's hearts all blessing it, was going very quickly to expand and prove the nucleus of the present University.

THE FIRST GRADE IDEA.

For two years from 1920, the Sri Minakshi College was an Intermediate College. But the head of the noble founder had gone pregnant with great ideas for its development. It had already conceived a plan for erecting a big building on the site of the grove opposite the Chidambaram Railway Station and just on the other side of the Railway fence to the east. Negotiations were soon afoot for the purchase of it for about a lakh of rupees. Now the nearness of it to the Railway line

necessitated the approval of the transaction by the South Indian Railway. To get that approval was therefore to be the first step in process. One Friday evening in October 1920, the founder whose visits to Chidambaram in those days were more frequent than now, sent for a certain lecturer in the college who happened to be acquainted with Trichinopoly, and asked him to go to that place the next day and see the Agent of the South Indian Railway on the business. The man agreed. But it so happened that he was just then back from an after-noon jaunt to the beautiful village of Tiruvetkalam, half a mile on the other side of the Railway line. As the man's head was full of it, he could not help observing to his master that a college founded on that site would be an ideal one at once far from the maddening crowd and under the greenwood tree—as if Hardy had named his novels for the very purpose of describing this college to be! The eyes of the founder dilated, as his heart expanded, at the suggestion. Directly the idea was suggested, the proposal to interview the Agent of the South Indian Railway was dropped. It was on the contrary decided that early the next morning the founder should visit Tiruvetkalam with a party of people connected with the college.

The next morning the party drove to the place in two stately vehicles drawn each by a pair of stately bullocks. The one in which the founder (with two others) drove, reached the spot earlier than the other. The founder alighted first and the two others in the bandy got down after him. That moment a proud and merry pair of kites flew just overhead and sounded their characteristic note so heartening to the Hindu. They flew so near the ground that the penumbras they cast

were visible to an observant eye. The founder instantly reacted to the occurrence. His happiness was visible, and in a voice tremulous with emotion, he said to the two that stood by and to those in the other bandy who had by then come up with them, "God granting me life for a year more, I build a college on this very spot which it has pleased Him to indicate by means of this unmistakable sign." Well, some men find joy in the sight of hoarded wealth. Some reluctantly spend, when compelled, the money they have hoarded. Where, in the division of men under categories do you think Mr. Annamalai Chettiar that day belonged?

The words the Rao Bahadur uttered on that occasion were solemn ones. They struck awe in his hearers. But the awe was greater when the speaker directly proceeded to translate his speech into action. There are countless dreamers of day-dreams among us who not seldom bestow on the ears of their friends the benefit of a clear (and often clever) enunciation of their plans and purposes; but not many among these ever proceed to the step that lies next after the enunciation. Not so in this case—of course not. Plans were immediately invited. Many were drawn, discussed and dismissed before one could be decided upon.

But at this juncture occurred an event as if exactly designed to show that in the affairs of business-men, if man proposes business invariably disposes. The founder's over-seas business now urgently called his attention and he was, as it were, dragged to the other side of the Bay. Long was his stay there—longer than we expected or he himself wished. When at last he returned home, the year 1921 was already old. His

disappointment was keen at the thought that his institution was still an Intermediate College, still housed in the High School and still not in a position to offer instruction in Science subjects even in the Intermediate. As the urge for its development was imperative on him, he decided that if, for the moment, it could not adopt Mathematics, Physics and Chemistry on the optional side and expand horizontally, it could yet grow vertically by the B.A. course being started with History and Economics among the optionals.

THE NEW BUILDING.

The College indeed was now first grade. But it had no house of its own, and had clean outgrown the room that the High School could afford it.

O! knowledge ill-inhabited worse than Jove in a thatched house!

Not many days however went by before the construction was started of the contemplated college at Tiruvetkalam. On June 29, 1922 was the B.A. inaugurated; that very month were trenches dug, on the chosen site for the structure to be. One Mr. Duraiswami Ayyar of Sengudi (our workmen's Sengudi Ayya) was both architect and building superintendent.

His supervising ability left nothing to be desired. It was as vast as the resources of his master. On July 2nd, 1923, that is in less than twelve months' after the beginning, the building was ready for our occupation. Three hundred and sixty feet from north to south and sixty from east to west, and one storey high, it was an extraordinary feat of brick-masonry to be performed during a single process of the sun. But what is not

possible to men possessed of wealth, and a willingness to spend it, and served by people, true to their salt?

The building is now what they call the Arts Block in the University—Arts Block though, as a fact, it accommodates Botany, Zoology and part of Chemistry. We moved to it at the reopening after the summer vacation in 1923. That day we added the First Group in the Intermediate and Mathematics in the B.A., to our courses of studies. That day the numerical strength of the College more than doubled itself: in 1922 our students had numbered 97; in 1923 we had 148 on the rolls.

THE HONOURS IDEA.

All this time, honours were being showered thick on the founder. A Rao Bahadur till as late as 1920, he became a Dewan Bahadur in 1921. In the year following he was Knighted by a sovereign—it was his late Majesty King George V-who evidently knew a good man when he saw one. But a man of action like our philanthropist attaches more value to the achieving of honour than to the gaining of honours, to doing good deeds than to winning recognition therefor. While the King Emperor was greeting him with ever newer titles as the years went by, he was going on expanding the new foundation at Tiruvetkalam. In 1924 the college had its first regular Students' Home. Students that had for a year occupied barrack-like apartments improvised at short notice at Tiruvetkalam, now quitted them for what in comparison with them, was verily a mansion. And for living in it, every undergraduate had to pay a rent of one rupee a month. "A ridiculously low sum!" one would exclaim. Yes, quite. But high-minded charity is

not seldom guilty of such ridiculous acts, and not seldom ignorant of their ridiculousness.

When the Students' Home was building, Philosophy was being instituted in the B.A. And as early as June 1925, this first grade college had the Honours courses added to it in as many as three subjects: English Language and Literature, History and Economics. In the June following, it got affiliated to the University in Physics and in Chemistry in the B.A. The building in which the laboratories and lecture-halls relating to these branches were contained had been constructed some time in 1925 and were now declared open by Viscount Goschen, then Governor of Madras and Chancellor of the Madras University.

People in the Annamalai University now call it the Science Block. It lies north of the Arts Block and is linked to it by an over-bridge. Great was the gala our students and teachers had that day. The Governor performed the opening ceremony in the morning amidst great eclat. Then followed a breakfast of the kind that only the Rajah of Chettinad is known to give in the South Country. In the afternoon there was a lecture by Mr. A. Ramaswami Mudaliar (now Sir A. Ramaswami Mudaliar, Commerce Member in the Viceroy's Executive Council) presided over by Dr. C. R. Reddi. Sir Annamalai Chettiar was himself present. The two speeches were worthy of each other, and the hall and the audience worthy of them both. Attention held the hearers mute except at those (frequent) moments when, at an uncommon sally of wit or an unexpected turn of expression, admiration ran high and applause rose loud. It was as if an argument in law had been started

by Coke and finished by Bacon, good Queen Bess sitting the performance through.

1927 AND 1928.

The chronicler pauses here, as pause he well may. For the years 1927 and 1928 were years purely of establishing, years during which, as the sequel showed, the founder was holding his breath and girding his loins for the next leap. That leap was to be the greatest of all that he had yet taken. It was but proper then that we should remain for a time where we had been.

We might certainly have started Honours studies in Physics and in Chemistry. But we did not; we contented ourselves with getting our men ready for it. The founder sent our lecturer in Physics to England in the autumn of 1928 to pursue higher studies in the University of London. And it looked as if until acts of preparation like this should be over, no further stage in the growth of the institution was to be attempted. Here therefore we pause just to take stock of what had been achieved.

In 1928, the Sri Minakshi College was a first grade college affiliated to the Madras University. It taught, besides the compulsory subjects (English and the Second Language) Physics, Chemistry and Mathematics (or the First Group of Optionals) and Ancient History. Modern History and Logic (or the Third Group of Optionals) in the Intermediate. In the B.A. (again besides English and the Second Language) it offered instruction in Branch I (Mathematics), Branch II-A, (Physics), Branch II-B (Chemistry) Branch IV (Philosophy) Branch V-A (Hisotry) and Branch V-B (Economics).

To accommodate these branches of study we had two buildings—the Arts Block raised in 1923 and the Science Block constructed in Our students 1926. numbering 426 at that date were housed in two big blocks of hostel building. They boarded in four messes, (or sections as they are popularly called in this part of the country) built quite adjacent to the Students' Home. Four of the teachers of the college had quarters on the premises: the Principal who was the head of the institution and three others who held office as wardens of the hostel. Looking back on what was doing here in those days we of the Annamalai University feel to-day a legitimate pride in what had been accomplished in so short a time and in him who had accomplished it all.

Our building programme had been started in 1922. It had gone on till 1928. At the rate of about a lac a year on the average, we had spent seven lacs of rupees so far on buildings.

Well, a solid material possession, that. And what was its spiritual value? Values differ with different people. But a point of some significance is well worth pondering in connection with the structures built from 1922 to 1928 by Sir Annamalai Chettiar. When we moved to our new college building in 1923, at Tiruvet-kalam, the place was little better than a wilderness. There indeed was a small temple and, surrounding it, a few hamlets. Human faces could indeed be seen here and there in that nook. But more than eighty per cent of the area going by the name of Tiruvetkalam was out of doubt, a wilderness. Prickly pear that used to meet the eye everywhere in South India (until a few years ago when an insect imported from Australia swept it all off

the country), had grown dense all over the place. Poisonous reptiles and insects had found cosy habitats amidst this thick growth. Even by day jackals could be seen playing in and out of the thickets as merrily as kittens in a house. And when we lodged our students in their hundreds in temporary sheds amidst these surroundings, we of the college (and its manager and proprietor, Sir Annamalai ('hettiar') undertook a grave responsibility. Menacing was the danger from reptiles. Our boys and ourselves however seemed to possess a charmed life. It was really astonishing. But to minds that can reflect there need be nothing astonishing in this. Had not a whole labouring population over a vast tract of country been afforded work and comfortable wages for full six years? Had not thousands been placed for six years above anxiety in the matter of keeping the wolf from the door? How many bricklayers, carpenters, masons, workers with the spade, hewers of wood and drawers of water, how many of them all had not had a comfortable time of it, had not been—some of them—even helped to a competence? And how many hearts therefore were not blessing the donor? These blessings are not nothing. The human heart speaking in the fulness of gratitude and uttering a prayer on behalf of the good-doer is not nothing. And it was not without due thought that the sage promised heaven to builders of houses and payers of wages. How could Sir Annamalai Chettiar that great house-builder that liberal wagepayer come by anything but good in the course of a charitable enterprise he had undertaken?

Buildings worth seven lacs are of course things of value. But this spiritual wealth? What do you estimate its value at?

THE ANNAMALAI UNIVERSITY.

All of a sudden, in the spring of 1928, newspaper readers were taken agreeably by surprise one morning when they read an announcement that Sir Annamalai had endowed twenty lacs of rupees on a University to spring into existence on the site of the Sri Minakshi College and that the site, the buildings, the libraries, laboratories and furniture belonging to the college should be made over to the University to be. The public congratulated us, the staff of the college, but in the same breath blamed, as is its wont, us and our founder for not having given it any inkling as to what had been going on within the college. The public would have been more to the point if it had blamed us, the staff, for not having read the founder's thoughts. The fact was that we were as innocent of the new development as the public itself. If the founder resembled the kings of the Ikshwaku line in that both they and he earned money only to give it away, he resembled a great king of that line in another respect: in that he and the great king mentioned never published their intentions and proposals until their intentions and proposals materialised and could be inferred by men by a process of arguing back from the results to the causes.2

While the public was indulging in angry mutterings at not having been taken earlier into the founder's confidence, the founder was proceeding at a round pace with the work of the University. A bill was introduced in the provincial legislative house (then the Legislative

त्यागाय संभृतार्थाः ।।
 फलानुमेयाः प्रारंभाः ॥

Council) for the creation of a University at Tiruvetkalam. It was to be a teaching residential and unitary University.

The day of the discussion of the bill in the legislative house was perhaps the proudest day in the life of the It was a holy act that he was performing: he was dispelling darkness and bringing light. He was doing it with money earned overseas, earned, as people now know, even at the peril of one's life on strands and shores far off. It was a holy act. And the character of the act showed itself in this: that while the bill was being discussed in the house of legislature, all parties were united, and no dissentient voice was anywhere heard. The poet cries that in the penance grove of Parvati lions and elephants, wolves and sheep were seen clubbing together. So holy was the occasion. Let us recall to the minds of our readers that on the day of the bill, the Treasury Bench and the Opposition, the Chief Minister and Mr. Satyamurti were at perfect accord.

The Bill becoming an act in September, the University began to function in the succeeding June. The staff of the old Sri Minakshi College were absorbed in the new University. The number was considerably increased by men being taken from outside. The appointments were to be made, according to the constitution, by a body called the Board of Selection. But as this body was mainly elective, and as those very bodies which were to be its constituencies had not been themselves constituted, a temporary Appointments Committee was created and that Committee did all the appointing for the year.

THE INFANT UNIVERSITY.

The Governor of the Province was the Chancellor of the University. Viscount Goschen was then Governor

of Madras and became our first Chancellor in June 1929. But when the University authorities, the Senate, the Academic Council and the Syndicate were constituted, it was already December and Viscount Goschen's period of Governorship had run out. The opening function of our Senate in March 1930 was performed by his successor, Sir George Frederic Stanley. Since that date the Province has had two more Governors and the Young University two more Chancellors. Sir Frederic Stanley was succeeded by Lord Erskine and he by Sir Arthur Hope, our present Chancellor. Brought up in the best traditions of English liberal education every one of these Chancellors has been an ardent champion of higher education. The Chancellor of three Universities at once, the Madras University, the Andhra University and our own, each of these noblemen has shown himself noble in his disposition towards seats of education.

Our Pro-Chancellor is by the Act, our Founder, the Rajah of Chettinad—yes, the Rajah of Chettinad. Our Founder had by now become a Rajah. The bill for his University had not been beaten into an Act on the legislative anvil two months, when there came a New Year day. On that day it pleased his sovereign to call him a Rajah—him and all the first sons after him among his descendants. How well it was in the fitness of things! It is customary in this ancient land for Rajahs to score wealth and spend it in encouraging learning. The founder of a University does become by that very royal act a Rajah in reality; and his Majesty King George V simply recognised an accomplished fact when he hailed this patron of higher learning a Rajah.

Great was the jubilation in the country; particularly at Kottaiyur where thousands of Nagarattars gathered

and greeted their honoured compatriot on cloth of gold, and at Annamalainagar where teachers and students felt, each of them, as if a kingdom had fallen to his lot.

At Annamalainagar? What and where is Annamalainagar? As King George V was calling Sir Annamalai Chettiar Rajah Sir Annamalai Chettiar, the Madras Government rechristened old Tiruvetkalam, the seat of the University by the name Annamalainagar. Truly there seem to be tides in the fortunes of places as in those of men. How else are we to account for the translation of a habitat of jackals into a temple of learning?

THE UNIVERSITY.

Besides the Sri Minakshi College three other (smaller) institutions went to the making of the new University: the Sri Minakshi Samskrt College, the Sri Minakshi Tamil College and the Sri Minakshi Pundit Training College. They were already three years old and were turning out Siromanis and Vidvans of the Madras University and certified pundits. The staff of each of these institutions now joined us, and the institutions formed the Oriental Faculty of the University. On the 1st of July 1929 therefore the Annamalai University was a unitary teaching and residental University consisting of three Faculties of Studies: Arts, Science and Oriental Learning. Among our students were Tamils, Telugus and Malayalees. On our staff were men from all parts of the country, distant Punjab itself not excluded. It came up to Newman's ideal of a studium generale, an emporium of knowledge, one to which students and teachers flock from all parts of the world for the purpose of carrying on commerce in knowledge.

As we had only the Arts Block and the Science Block to accommodate this vast assemblage, we erected temporary sheds for the housing of our new guests, the Orientalists. But as patch-work business is never in our founder's way, in but two years after the arrival of these new guests, our Oriental Block was ready and the temporary sheds were abandoned. This new block is what you now see at the southern extremity of the old Arts Block answering to the Science Block at the northern, and linked like it to the Arts Block by means of an over-bridge.

But progress did not stop here. As early as 1929, that untiring patron of arts and letters, our founder had started a Music Academy. Musicians from all quarters of the country had come and set the Academy on its legs. But at that time this institution did not form part of the University. Soon however it did. In December 1931 the Academic Council decided, and the Senate endorsed the decision, that this Music School should form part of our Oriental Faculty and that the Rajah of Chettinad, the founder, should be approached, for his consent. The Rajah saw that the measure if taken would but redound to the glory of the University. And as whatever did so commended itself to him, the consent sought was without difficulty obtained. We are now in a position to claim the teachers of Music at Annamalainagar for our colleagues in the University.

In 1929, Science had indeed received its due share of attention in that Honours Studies in Physics and in Chemistry were started soon after the University had begun to function. But we have been living in days of an irresistible Science wave this quarter of a century and Honours courses in Physics and Chemistry would scarcely serve the turn of our student population. The vast majority of them are ardent votaries to Science. So in 1932, we started instruction in Natural Science—Botany and Zoology—in the Intermediate; and, when in two years from then, our young naturalists passed the Intermediate Examination, we accommodated them in the B.Sc. class in the branch which was after their hearts.

But what did all this mean? Why, only this: the musicians and the naturalists knocked at our door for living room. The naturalists who were, for the time being, housed in the Arts Block pitilessly pushed our office staff and our already vast and yearly growing Library out of that block. We had nothing for it but to turn once more to brick-masons and carpenters for help in this stress. The Library and Administrative Buildings which greet you to-day as you enter the premises were the result. They have cost us a pretty penny. They and the Convocation Hall which lies between them together cost us four lacs of rupees.

This pile is what they call the Srinivasa Sastri Hall. Writing to us the other day a visitor of artistic taste and educational enthusiasm said: "The Srinivasa Sastri Hall is really the pride of your University; why, for that matter, it is the pride of South India, I believe. How I wish to pay another visit to those grand buildings!"

Grand buildings indeed; and one may also allow, not wholly inartistic. But even they have not sufficed our needs. Our musicians were still houseless. Our students in the hostel had the same complaint to prefer. And the guest-house we had was so small that without a

really spacious structure for the accommodation of our guests, we could not come up to any decent standard of nospitality. Again were the engineering staff of the University busy with plans and estimates, again did brick-masons appear trowel in hand. Between 1936 and 1938 we raised no less than five substantial structures: our music school, a dormitory for the rest of the musicians after their exertions, the guest house which you see overlooking the park and two new blocks of hostel buildings. In 1939 another block still was needed for our hostel and another block was brought into existence.

It has been already said that ours is a residential university—the first of its kind, it will be conceded, in our part of the country. If the residential ideal is to be fully realised, it is obviously not enough to have rooms for students; teachers have to be provided as well as they. This fact we kept in view from the first. Our Professors, Lecturers and Pundits have all of them got residential quarters on the premises. The office staff are there too. The Vice-Chancellor's bungalow stands on the road to the University and is in fact the first considerable thing that strikes the Railway passenger's eye as the train crosses the Coleroon bridge and steams into South Arcot area.

And there we are with our men, materials and buildings. And yet our men and materials so grow everyday—God be thanked—that every day they call for more buildings. Our science students grow so numerous, and our books so multiply in number that we wish that brick walls and wooden shelves were elastic!

Whence, one may ask, all this growth? What makes all this expansion possible? The question is easily

answered. In the first instance, we must render thanks to an enlightened provincial government that has given and is every year giving us large money grants, that encourages us in every way in our endeavours and that even in times of war like the present does not wholly bang its door on us when we knock at it. And then we have had a singularly noble succession of Vice-Chancellors. He that first filled that office was Dewan Bahadur S. E. Ranganathan who has been since thought fit to fill a higher office in the Council of the Secretary of State. His successor was the Rt. Hon'ble V. S. Srinivasa Sastri who by scholarship and by a never to be ruffled temper has established his right, these five decades to preside alike over the destinies of educational institutions and offer counsel about the steering of the ship of the state clear of schools on tempestuous seas. And his successor, the present Vice-Chancellor, is Dr. Sir Kurma Venkata Reddi Naidu, one that has been in one capacity or another in the public eye ever since the century began, has been without interruption, chosen to high places in the Councils of the Empire from the very dawn of Democracy in the land, has seen and guided the birth and growth of selfgoverning institutions in the country, has been from time to time honoured with the personal regard of his sovereign and has filled the exalted office of Governor in the province of his own birth. How can an institution like ours help growing and expanding under the rule of heads like these? But above all we owe our rapid growth to the constant and anxiously watchful care of him whom the University claims as its parent, whose paternal love has placed at the disposal of this child of his all that it needs for its nutrition and development, whose head is as wise in perceiving a noble cause as his heart is in giving support to it and in whom the high-minded charity of the East and the clear-headed business spirit of the West meet and proclaim that, if it is a mark of divine grace in the human being to strive, save and serve," then, East plus West is much the best.

THE PLACE OF MR. T. LAKSHMANA PILLAI OF TRAVANCORE IN CARNATIC MUSIC

By

DR. H. SUBRAMANI AIYAR, M.A.

Professor of Mathematics and Superintendent, Observatory, Trivandrum.

The productions of Mr. T. Lakshmana Pillai of Trivandrum, both as a Tamil Poet and a composer, have been before the public eye for such a long time, that it will not be inopportune at this moment to try to form an estimate of their merits and so to fix his place, especially as a Tamil composer, in the field of Carnatic Music. In the present article, I propose to deal with Mr. Pillai as a composer only.

In adjudging the merits of musical compositions, and the place of a composer in Carnatic Music, we have to take into consideration and examine some of the important aspects of his compositions such as:—

- (1) The literary correctness and worth of the language employed in the compositions.
- (2) The value of the thoughts and sentiments embodied in them.
- (3) The excellence of the music in which they are clothed, which includes also the fertility of his musical imagination.
- (4) The originality or creative power of the composer.
- (5) The purity of the style of his music.

As regards the literary correctness and worth of the language employed in Mr. Pillai's compositions, we do

not need to dilate much here, as they have been acknowledged by such an eminent authority in Tamil as Dhakshinathiya Kalanidhi Maha Mahopadhyaya Dr. V. Swaminatha Iyer of Madras who, in the course of his presidential speech at one of the musical demonstrations given by Mr. Lakshmana Pillai at the First Line Beach, Madras, expressed the opinion that Mr. Pillai's Tamil was faultless. This has led to his placing the name of Mr. Pillai first among the living composers of South India, in the message which he recently sent to the Music Conference held at Annamalainagar this year.

As far the thoughts and sentiments conveyed by Mr. Pillai's compositions, it will be well to point out that the subject matter of the compositions falls under three or four main heads, such as Philosophical, Ethical, Devotional and Humanitarian. This will show the wide range of the thoughts and sentiments set forth in song. and will be found to be a healthy departure from the stereo-typed nature of the subjects usually treated of by other composers whose compositions are mostly of the mampahi type. In his compositions, Mr. Pillai shows a remarkable originality of thought and sentiment, which will be welcomed by the educated and enlightened section of the public, besides presenting a salutary model for future compositions. Even in his purely devotional songs, Mr. Pillai deals with the subject in his own original fashion. His compositions are cosmopolitan in outlook, and are imbued with a tenderness, fervour and depth of feeling, rarely met with elsewhere. They are not addressed to any particular deity, such as Rama, Krishna or Subramania, but to the one Supreme Being, whose manifestations or Avatars they may be taken to be, thus appealing to the followers of all religions that

acknowledge one God, and entirely free from any references which may tend to give even the slightest offence to the religious susceptibilities of even the most orthodox of every religion.

Coming now to the intrinsic excellence of the music in which the sentiments are clothed, one feels the same freshness, originality and exhibitantion that one meets with in the compositions of the great Thiagaraja or Dikshatar; and this fact raises Mr. Pillai's compositions to the highest level of merit. In support of this statement, it is possible to quote from the testimonies of competent men like Mr. Tiger Varadachariar and others. But in this connection, I shall merely content myself with quoting the opinion of Mr. K. N. Sivarajan, B.A., expressed in the "People's Opinion" of which he was the editor. Said he on the 11th October 1919,

"His (Mr. Pillai's) compositions taken as a whole prove in the most convincing manner that Tamil is not a wit behind Telugu in its capacity to produce highest musical effects and also that he himself can take rank with the great Thiagaraja. Take with this, the wide variety, the striking individuality and the absolute freshness of his pieces; they are enough to show how fertile and original Mr. Lakshmana Pillai's imagination is in the creation of musical forms of incomparable beauty felicity of diction, aptness of melody, uncommon originality of form, and fecundity and variety of variations, his compositions rank with the best pieces of Thiagaraja. They bear marks of genuine inspiration and as creations of Mr. Lakshmana Pillai's musical imagination, will ever remain to gladden the hearts of generations yet unborn. It is the supreme privilege of genius to serve

humanity even after its bones had smouldered into dust. Enshrining beauties of rare musical forms, Mr. Pillai's compositions, we are sure, must live for all time to come."

Indeed, the beauties of Mr. Pillai's musical compositions elicited the admiration of the highest order of musicians, such as Messrs. Ganavisaradha Bidaram Krishnappa, Konerirajapuram Vaidyanatha Iyer, Govindaswamy Pillai, Naina Pillai of Conjeevaram, Ramachandra Bhagavatar of Trivandrum, Ganavisaradha M. S. Ramaswamy Iyer, Doraswamy Iyer of Ernakulam and Samalam Iyer of Tinnevelly, many of whom expressed a desire to study them. The first named musician actually studied a dozen songs from Mr. Pillai direct, as also did Srimati Saraswathi Bai and others from Madras.

In the matter of the introduction of variations in musical compositions, Thiagaraja having been the pioneer, Mr. Pillai kept that model in view. He however, never borrowed combinations from Thiagaraja or any other composer, but relied on the exuberance of his own imagination. His originality in this direction never wavered, as will be apparent to any listener of his compositions.

Lastly, the style of music employed by Mr. Pillai in his compositions is unexceptionally pure, like that of Thiagaraja. He never yield to the temptation of introducing Hindustani or other foreign styles into his music for the sake of temporary pleasure or for embellishment, or for popular applause, such aberrations, in his opinion being injurious to the true genius of Carnatic music.

Thus, viewed from every standpoint, it may be affirmed without hesitation that Mr. Pillai is one of the greatest living composers in Carnatic music, and this accounts for his being styled as 'Tamil Thiagaraja' by Mr. M. S. Ramaswamy Iyer, and recently, by Srimati Saraswathi Bai during her demonstration of Mr. Pillai's songs at the Annamalai Music Conference.

Mr. Pillai was given the title, some years ago, of Tsai Tamil Selvar by the Madras Provincial Tamil Conference, held at Tinnevelly. It will be seen therefore that he was deservedly honoured with a full size oil painting by the public of Travancore, which is now placed inside the Travancore University buildings. Another portrait of Mr. Pillai was also unveiled some time ago at Tinnevelly.

Among the most popular of his songs may be mentioned the following ten:—

Initial words.		Raga.
என்ன செய்தாலும	•••	Kambodi
டின்று மை முச் சரித்தால்	•••	Nelambari
சங்கடமே ஜகம்	•••	Kunthalavarali
நானவர் பாரையும்	•••	Kamas
சீ ரா டி		Sahana
அ ருட்பெரு	•••	Shanmukhapriya
எ ன் பி ழை யாவும்	•••	Kamas
அ ன்ப <i>ாு</i> ளம்	•••	Vachaspathi
கடுவுளே யேறியா	•••	Kanada
நன் <i>றி கூறு</i> வமே	•••	Begada

CHIDAMBARAM AND THE DIKSHITARS OF THE SIXTEENTH CENTURY A.D.

By

BHARATAKALANIDHI VIDYASAGARA VIDYAVACASPATI

P. P. Subrahmanya Sastriar, B.A.

M.A. (MADRAS)

Professor of Sanskrit and Comparative Philology and Curator Government Oriental Manuscript Library, Madras.

Chidambaram has always been famous not only for its spiritual and religious excellence but also for its high intellectual traditions.

In its long history from the beginning of the Christian era, the sixteenth century was really an epochmaking era in its literary tradition. The great Polyhistor Sriman Appaya Dikshitar spent the last part of his life at Chidambaram. Appaya Dikshita's Interary activities ranged from 1570 to 1620 A.D. The reputed author of more than 104 works distributed over all branches of Sanskrit language and literature, he was a star of the first magnitude in the literary horizon of Chidambaram, which attracted unto it, because of his presence, all the learned scholars of the day from far and near, north and south.

The great Bhattoji Dikshita, the son of Lakshmidhara Pandita, the pupil of Sri Sesha Krishna and the author of standard works in grammar like the Siddhantanta Kaumudi, Praudhamanorama and Sabda-Kaustubha came to Chidambaram to meet the illustrious Appaya Dikshita and sat at his feet for being initiated into the intricacies of the Vedanta Sastra. In his

Tattvakaustubha, Bhattoji Dikshita has exhibited ably his profound mastery of the subject.

Among the many works of Appaya Dikshita, the Tantrikamimamsa deserves special mention as therein he has made a direct quotation from the Smriti-Muktaphala of the venerable Vaidyanatha Dikshita. Sriman Vaidvanatha Dikshitar is well known throughout India as the standard Law-giver of the South. Born in Kandaramanikkam a village in the Tanjore District, his literary activities must have come to a close shortly before Appaya Dikshita's began. The Smriti writer Vaidyanatha Dikshita must be deemed to be identical with the author of the Ramayanadipika a commentary on the Ramayana. The author shows his Ramabhakti not only in his commentary on the Ramayana but also in the benedictory stanzas prefixed to each of the seven Kandas of his magnum opus the Smriti-Muktaphala. Besides, the stanzas in which the composition of the Smriti-Muktaphala and the Ramayanadipika are referred to, are significant of the title of our author wherein he refers to himself as Vaidyanathadhvrin and not as Vaidyanatha or Vaidyanatha Dikshita as he is popularly referred to. There does not therefore seem to be any doubt regarding the identity of the authorship of the two works; and Vaidyanathadhvari or Dikshita must have been an immediate predecessor of Sriman Appaya Dikshita.

In his Ramayanadipika I-4-2 Vaidyanatha Dikshita refers to the view held by others that the actual increase in the number of Granthas in the Ramayana over the prescribed 24,000 should be due to the admixture of longmetres verses in the Trishtubh and the Jagati, which

exceed the thirty-two normal-lettered stanza. And this is the view actually held by the slightly earlier commentator on the Ramayana, Sriman Isvara Dikshita the author of both a Brihad—and a Laghu Ramayanasara-samgraha, the date of composition of the former being 1518 A.D.

The sixteenth century in South India counts thus the illustrious names of Isvara Dikshita, Vaidyanatha Dikshita, Appaya Dikshita and Bhattoji Dikshita among its literary votaries; and Chidambaram had the honour of attracting these to the feet of Lord Sri Nataraja whose cosmic Dance still continues in all its unabated vigour even to-day as in days of old.

Note.—All the works cited above are available in print or manuscript in the Madras Government Oriental Manuscripts Library.

NATTUKOTTTAI CHETTIARS

Their Banking System

By

P. J. THOMAS, M.A., D. PHIL., M.L.C.

On an occasion like the present, when we are honouring the most distinguished of the Nattukottai Chettiars, it may not be out of place to give a short account of the banking activities of the Chettiar community which have enabled them for long to serve the country, not only in the economic but also in the educational and other spheres of public activity.

In many respects, the Nattukottai Chettiars are the most remarkable bankers of India. To them banking has not been the tail-end of trade; they nearly always confined themselves to banking and their business methods are of a highly specialised character. Chettiars' area of operation is also more extensive than that of other similar communities. From their home in Chettinad, they first expanded their business all over Madras Presidency and the Indian States adjoining Subsequently, attracted by the increasing thereto. opportunities for profit opened out by the growth of plantations in Ceylon, Malaya, Burma, and Straits Settlement, the Chettiars went over to those countries, and to-day they carry on an extensive banking business all over Southern Asia, including Siam, French Indo-China, Sumatra, Java, and neighbouring Islands. They have penetrated into the innermost fastnesses of those

countries; they finance the rice trade of Burma and have also important interests in Ceylon rubber and tea and Malayan rubber.¹ In fact their banking business in India is to-day only a small fraction of their total business.

The Chettiars are also called Nagarattars, because they belong to certain nagarams (or townships), 9 in number. At the head of each of those nagarams there is a temple, which is maintained by the common funds of the Nagarattars. The married couple (pulli) forms the social unit of the community, and each such unit has to contribute pullivari and asti-vari to the temple. They are devotees of Siva and are generally vegetarians. They have built fine temples and have established several choultries and poor houses, and have always shown readiness to contribute liberally to public charities. From ancient times, a percentage of the profits of all Chettiar firms has been set apart for charity (magimai).

Like the Marwaris and Jains, they are sparing in their expenditure on personal comforts and all their daily avocations are characterised by extreme simplicity and frugality. Yet they have been lavish in the making of ornaments and in the building of houses. The barren region of Chettinad is studded with numerous palatial houses which cost on an average Rs. 100,000 each to build; in Devakotta alone, there are many such houses. The total investment in houses and jewels is estimated at about Rs. 14 crores. When Chettiars go away on

¹ Their connection with Ceylon and Malaya dates back to a time earlier than the boom in tea and rubber; but they first went there chiefly for trade and only subsequently took to banking. *Madras Banking Committee's Proceedings*. Vol. III, p. 1170.

business, their families generally stay in Chettinad. But they always come home to perform their ceremonies, and marriages are celebrated almost invariably in the ancestral homes.

Most of the indigenous banking communities of India do not carry on money-lending as their sole business. They may also be general merchants, commercial agents, dealing in bullion, cotton, grain, cloth and other produce, brokers or jewellers.² Often money-lending is only auxiliary to these occupations. Thus in Bombay, U.P. and C.P. the bankers trade in grain and cotton and carry on speculation. They purchase cotton and grain at harvest and store them against a rise of price. The Marwaris of Bombay operate on the cotton exchange, and to them money-lending is only a side-line. Elsewhere they are large landowners, or own mills and factories. In Bengal,³ they finance a considerable proportion of the distributive trade. In fact most of the indigenous bankers are but businessmen using their capital to earn a profit and they undertake any kind of business which in their view will bring profit. This has always been the case in India. Money-lending was auxiliary to trade and with the increasing vogue of jointstock banking in India, this tendency has grown more conspicuous than before.

The Chettiar and the Multani are the principal exceptions. Even among these two classes, there may be several pursuing other trades as well, but nearly always even those trades are allied to banking. For example, the Multani buys and sells gold and carries on

² Jain, Indigenous Banking, pp. 43-45.

³ Bengal Banking Report, p. 185.

internal arbitrage operations and some of them also buy and sell commodities for their clients. Arbitrage transactions and dealing in bullion are auxiliary to banking, and profitable, if safely pursued. The Chettiar sells gold, but the sales are mostly unredeemed pledges. There are also some who buy and sell gold as a regular business.⁵ Speculation is usually associated with indigenous bankers, and in the case of several classes of them, it is a fact that they have been speculating in commodities as well as in bullion. Such speculation ruined several wealthy bankers in the past, and now there is much less of it than before. The Multanis seldom buy and sell commodities for themselves, and as for Nattukottai Chettiars, they avoid speculative dealings, and this partly explains the stability of their business even in bad times.6

It is true that several Nattukottai Chettiars have become proprietors of rubber and tea gardens, rice mills, saw mills and other factories, not only in India but in Ceylon, Burma and Malaya, but it must be admitted that this was not due to deliberate design but was thrown upon them by the failure of their debtors to pay up. Thus in Ceylon, Chettiars have become owners of several rubber and tea estates and oil mills; and in Burma, they have now much land in their possession. This apparently was not due to the Chettiars' desire to become landowners, and in several cases the land was sold away where an opportunity came; and although a certain

⁴ Indian Finance, January 18, 1930, p. 72.

⁵ Burma Banking Report, p. 197.

⁶ Madras Banking Committee, III, p. 1175. This was in the matter of rice imports to Ceylon, and this gave a windfall to the Chettiars of Tirupattur and around.

number of Chettiars have taken to cultivation of land in Burma by hired labour, it is not possible that the great majority of them will give up their hereditary profession.⁷

ORGANISATION OF THEIR BANKING BUSINESS.

The business of most of the banking communities of India is organised on the joint family basis. Members of the family work in common as farmers and the profits go to the common fund of the joint family. Not only do they live in common, but they generally keep a common mess. When such a firm takes outside partners, they are taken only as working partners with a share in the capital, and such partners are paid a fixed salary and bonus according to the profits of the business. Indeed as families get larger and larger division is effected, not only of the capital but also of the clientele.

The above, however, is not true of the Nattukottai Chettiars. With them, every married person of means has his own business or becomes partner in another business. When a Chettiar marries, he becomes independent. He may live in the same house as his parents, but he has his separate mess, and every year a budget allotment is made by his parents for his maintenance. This custom has made the Chettiar more independent and self-reliant than his compeers.

In spite of such pronounced individualism and selfhelp, the Nattukottai Chettiars have developed among themselves a strong tradition of mutual help and sodality. In all the principal towns, where they carry on business, they congregate in one common street and often live and

⁷ See Burma Banking Report, pp. 198-99.

work in the same premises although their business may be all separate. Wherever they go they maintain a common temple, and have many economic, social and other interests in common. Many of their firms are partnerships, and such partnerships may last many generations. The same person may have shares in several partnership concerns and thus there is strong interlock of interests between them.⁸ Even when such interlocking does not exist, the Chettiars are prepared to guarantee each other, and in times of need, they are ready to give generous aid to distressed firms. guarantee each other when borrowing from the jointstock banks and such solidarity enhances their credit in the market. This system of mutual guarantee has also its evils, for when one firm fails many others may also be involed in the failure and a general crisis may result.

Such sodality is naturally stronger among the Chetties in distant centres. 'Existing as a small alien group with frequent blood relationship and with common economic interests, descent, language, worship and all caste associations, but divided in all these points from the population around them was sure to generate a feeling of sodality, especially as there was necessarily mutual dependence in some matters, such as the occasional need of liquid resources.' In Rangoon, Singapore, Colombo and other outside centres, they all congregate in the same street and even have their offices in the same building. Thus all the Chetty firms at Rangoon are in Moghul

⁸ The firms are generally called by the initials of the different combining partners. Thus P. M. R. M. means the partnership of Palaniappen, Murugappen and Ramanathan. The name of the agent is often given after the initials.

⁹ Burma Banking Report, p. 194.

Street and in close vicinity of their temple, where they all meet in the morning daily for exchanging news and for fixing up interest and terms of business.

There is also a strong communal system of arbitration obtaining among the Chettiars. Attached to every temple (kovil) is a temple council (Panchayat), which is composed of the elders among them and adjudicates on all matters relating to marriage, monetary transactions, family disputes, etc. The manager of the Kovil arranges for meetings and records evidence; and the award is given orally and not usually in writing. If the parties do not abide by the decision, they may be ostracised, and their marriages may not be celebrated under the auspices of the Kovil.¹⁰ Similarly when a man fails, a Panchayat is appointed to take up the matter and they generally settle affairs in such a way that intervention by the Court is avoided and the unsuccessful man is given a chance to start life again as employee of some other firm.

Similar institutions exist among other indigenous bankers also. However, of late such institutions are getting weaker owing to the onrush of individualism.¹¹

Most of the indigenous banking firms are family businesses or partnerships. The Multanis are organized on a joint family basis and therefore the different members of the family manage the business in different parts of the country. The leading partners generally live at Shikarpur or Bombay, and the junior partners work as agents abroad. Besides members of the family, others are taken as working partners.

¹⁰ Thurston, Castes and Tribes in S. India, Vol. V, p. 263.

¹¹ Jain, Indigenous Banking, p. 40.

The Chettiars form partnerships, especially when establishing firms abroad. Thus, excepting the Bank of Chettinad (which is a private limited company registered under the Indian Companies Act), the Chetty firms in Burma are partnerships organised in India and represented there by agents sent from India. The money is sent from India, and the accountants and clerks are also Indians. Both in India and abroad Chettiars maintain firms only in the larger towns and trade centres. Sometimes small agencies called *Ulkade* are opened in outstations and railway stations (*railkade*) and these are controlled by the agents in the larger centres.

The agent is the central figure in the Nattukottai banking business, whether within the country or abroad. He is often a relative of the partners and is engaged on a three years' contract during which his board and lodging is provided by the principal. Part of his salary (3 to 3) will be paid a month after appointment and the other part after the expiry of half the period. The amount of the salary will depend upon the ability and position of the agent, the volume of transactions and upon the distance of the agency from the head office. In Burma, the usual rates range from 6,000 to 15,000 rupees for the Besides pay, the agent is also given on triennium. return a bonus which may vary from 6 to 10 per cent of the net profit earned during his term. Six months before the expiry of an agent's term, another person is sent to the spot, to get acquainted with the details of the The new agent classifies all the outstanding loans as good or bad and sends a report to the proprie-If the two agents disagree reference is made to the proprietors. The outgoing agent will then return to

Chettinad and settle up with his employers, after which he will go home and take rest for three years. He may then offer himself for appointment to his old employers, or set up a business himself. If the agent is an able man, his employers may make him a partner in the business.

An agent has usually an establishment of 5 to 6 persons, of whom the principal are the Assistant (aduthal), the Cashier and the Accountant; others are usually young persons learning the business and generally help the principal employees by going on errand, etc. All these persons are selected with great care, and careful watch is kept on them. Severe punishment will be meted out in case of dishonesty, and, to a Chettiar, caste ostracism is a worse punishment than conviction by court.

An apprentice is usually paid no salary for the first triennium, he gets only his board and lodging and pocket money. On return home, he may, like the agent, receive After a year's rest, he is again sent out on a fixed salary, anything between Rs. 1,000 and Rs. 2,000. The salary is increased at every succeeding periods The apprentice gradually becomes of engagement. accountant or cashier, and after 7 to 8 years may become an assistant agent and sent to an out-station. After about 15 years' experience, he becomes a full-fledged agent. The sons of large bankers have also to undergo nearly the same training, although the period may be shortened. The Chettiar is a firm believer in the maxim that he who wants to command must first learn to obey. Therefore the sons of wealthy families are also apprenticed.

The working capital employed by the Chetty community has been estimated by the Burma Banking Committee at about Rs. 120 crores, of which 75 crores are in use in Burma, 25 in F.M.S. and the Straits, 14 in Ceylon, 5 in Cochin China¹² and only one crore in Madras Presidency. According to the Madras Banking Committee's estimate, the amount of working capital in Madras is Rs. 6½ crores, and its volume of business is as much as 11 crores.¹³ Another estimate was made by Mr. Saverinatha Pillai, Assistant Commissioner of Income-tax, in a memorandum which he placed before the Committee. According to him the volume of business in the Presidency is only 3 crores, ¹⁴ apparently excluding the Bankers of the Pudukottai State from his computation.

SOURCES OF THE CHETTY CAPITAL.

A banker is sometimes described as one who makes profit with other people's money and his own brains. Indigenous bankers in India do indeed make profit, but it is not chiefly with other people's money. The system of receiving deposits obtained from time immemorial, but often it was done to oblige the depositor more than to benefit the banker. However, with the increased opportunity for investment, a demand for deposit arose among bankers, and moneyed men deposited large sums with them. But there was always a reluctance on the part of Chettiars to receive current account deposits, and, as the joint stock banks showed no such reluctance, the bulk of Indian deposits went to them. At present the indigenous bankers deal with their own money or

¹² Burma Banking Report, pp. 210-11.

¹³ Madras Banking Report, p. 186.

¹⁴ Madras Banking Report, Vol. III, p. 1174.

money borrowed from joint stock banks. The Nattukottai Chettiars still receive deposits, both on current account (kata kanakku) and on fixed deposit (thavanai kanakku). But such deposits form only a small part of their working capital. According to one estimate, about two-thirds of the Chettiars' working capital is supplied by the proprietors themselves, and of the rest more than one-half comes as deposit from other Chettiars. Thus only one-seventh of the capital comes from non-Chettiars. It used to be rather more, but owing to the failures of Chetty firms in recent times deposits from the public are not at present so abundant as they used to be. 15 The Chetty capital thus deposited is chiefly the money of married women and widows. Chetty women receive fairly large dowries at marriage, and these moneys are generally placed on deposit with a number of firms. Chettiars will not generally place all their money with one firm, but will distribute it among different firms for the sake of safety. The non-Chettiar capital that comes into Chetty firms is either deposited by the public or borrowed from joint stock banks.

The kinds of deposit best known to Chettiars are 'Tavani' deposits and 'Veyan-vatti' deposits which are both fixed deposits. The Tavanai deposit is for a period of 2 months, and its interest is fixed monthly, on the 16th day of the Tamil month. The depositors are mostly Chettiars, and only these receive the full tavanai rate fixed, while the others have to be satisfied with a percentage or two less. The veyan-vatti deposits are fixed deposits at fluctuating rates of interest described by its excess in annas per Rs. 100 per mensem above the

¹⁵ Burma Banking Report, p. 213. Madras Banking Report, Vol. III, p. 1176,

current rate, and the usual period is three, six or twelve months. Deposit receipts or Promissory notes are given to the depositor; but it is understood that demand will not be made till the prescribed period is over. Deposits on current account are less popular owing to the necessity for keeping liquid resources that it involves. The rates on current account deposits are fixed monthly, on the 16th of every Tamil month, and they apply not only to ordinary current account deposits by Chettiars and others, but also to the rates paid by agents to the principals for working capital supplied, and veyan-vatti rates are calculated on the basis of the current rate as fixed monthly.

THE CLIENTELE OF THE CHETTIARS.

Chettiars lend to agriculturists as well as traders, but, in the case of S. India, it cannot be said that they finance agriculture or trade to any great extent. Agriculture in S. India is financed chiefly by the village money-lender, who may be a shopkeeper or a landowner. Some Chettiars do lend to these people and thus they may be said to indirectly finance agriculture. In Burma. on the other hand, Chettiars are first and foremost financiers of agriculture. In Lower Burma, their dealings are chiefly with landlords and agriculturists, but in Upper Burma traders are their principal clients. fact, the Chettiars lend to all those who have personal credit, whether they be agriculturists, industrialists or traders. They lend for both short-term and long-term purposes, and the purpose of the loan is seldom a consideration for them. Most of the long-term loans given by them are for celebrating marriages or other social ceremonies or for other unproductive purposes.

the amounts given for such purposes will depend upon the security offered. Generally money used to be lent on promissory notes, whether it be for long-term or shortterm purposes. But now on account of depression security is demanded. It may be land, houses, gold and jewellery, or Government securities. For long-term loans, land and houses are the usual security demanded; gold and jewellery are always acceptable as securities as they are readily saleable. The rates of interest charged by Chettiars vary with the parties, the time of the year, the purpose of loans, the security offered, and the amount of the loan. Except on first class town mortgages, interest is not usually less than 12 per cent per annum.

The Chettiars have no fixed hours of work and are accessible at all times. Their principal holidays are Thaipuzam, Chitra-Pournami and Panguni Uthiram. Accounts are kept in Tamil, on a system of single entry, but two principal books are kept: the 'kurippu' (journal of daily transactions), and 'Peredu' (ledger, each page being allotted to one client). The ledger account for the borrower has three cash columns for interest received, credit and debit respectively, and the serial number of the documents also are entered therein. It is also customary to keep 'chittai' books (rough notes), and 'bake' (balance) books. Every month balance sheets are prepared by the agents and, with copies of chittai, are sent to the principal.

The Chettiars' system of accounting is elaborate and accurate. Without the use of interest tables and calculating machines, they can easily calculate interest to the lowest *immi* (1|3200th).¹⁶ The Chetty boys are trained

¹⁶ The fractions in use in S. India are ara $(\frac{1}{2})$, kal $(\frac{1}{4})$, arakkal $(\frac{1}{4})$, makani $(\frac{1}{16})$, ma $(\frac{1}{10})$, muntiri $(\frac{1}{320})$, immi $(\frac{1}{3200})$.

at an early age to such accurate calculations and they get a wonderful mastery of arithmetic in the course of their office work.

RECENT TRENDS.

In recent years the Chettiars have modernised their banking methods and nave started commercial banks on the joint-stock basis. The Bank of Chettinad, a private limited company, is the most notable of such ventures, and the Raja of Chettinad is its Managing Director. Of late, the Chettiar capital has also penetrated into large-scale industry, and to-day a good few cotton mills and other factories are owned or controlled by the Chettiars. This is a desirable line of development and it is particularly gratifying to the present writer, as he had repeatedly suggested in the past such new outlets for Chettiar enterprise.¹⁷

But such developments have lately been impeded by various factors, the most potent being the freezing of investments resulting from the Great Depression of 1929-33. When the agriculturist debtors lost their purchasing power, they were unable to pay their debts, and a large part of the Chettiar capital thus got locked up in land. In Burma alone, the Chettiars were forced to become owners of extensive areas amounting to nearly 3 million acres, being a fourth of the total occupied area in Lower Burma. Measures have been in contemplation for liquefying such torpid investments, but various difficulties have arisen. The repatriation of such capital may be a source of profit not only to the Chettiars but to the country as a whole.

¹⁷ Journal of the Madras University, 1933, p. 38.

In spite of various adverse factors, Chettiars have been able to utilize the new opportunities offered by the development of hydro-electric power and the expansion of communications. They have shown ample evidence of financial virility, alertness and go-aheadness. Let us hope that this great banking community will be in the forefront of the movement for the economic development of India which is likely to gather strength during and after the war.

ENDOWMENTS FOR HIGHER EDUCATION

By

C. N. VAKIL

University Professor of Economics, Bombay.

In connection with the movement for the political and economic emancipation of the country, the need for education is imperative. The masses should have sufficient elementary education to take an intelligent interest in their own affairs as well as those of the community. At the same time there should be adequate provision for higher education because it is from the ranks of those who have received such education that we can find leaders of thought and action—either to lead the country in politics and business or to help in the ever-growing administrative work of a modern Government.

We find that the Provincial Governments in our country have been giving increasing attention to the spread of primary education. Legislation has been passed towards this end. Municipalities and Local Boards have been encouraged to undertake the work, and though a great deal remains to be done, good progress has been made in recent years.

While this is as it should be, secondary and higher or University education does not receive that attention from the State which it deserves. We find that in both these spheres what may be called 'the commercial spirit' has crept in. A large number of High Schools and Colleges are run on the commercial principle, by which is meant that the attention of those in charge of such institutions is directed more towards earning profits than

towards efficiency in teaching. There are a number of Proprietary High Schools in the country in whose case, it is quite easy to see how the commercial spirit works. We do not have Proprietary Colleges; but we have Colleges run by Societies which collect funds from the public to run them. A good number of High Schools are also organised in the same way. In some cases, the same Society runs a school and a college or has a number of such institutions under its control.

It may be pointed out that whereas Proprietary Concerns may pocket the profits, in the case of Societies the profits do not go to private individuals. The Societies utilise such resources for extending their activities, and to this extent there is no moral wrong in the work of the Society, though it is a question whether educationally it is sound.

But the question arises as to how is it that it is possible to realise surpluses by running, let us say, a College. The answer is simple. The number of students attending colleges is growing. The desire to have a University hall mark has spread and most parents wish that their sons or daughters obtain University degrees, if they can afford them. The fee income of the colleges is thus bound to increase. This receipt can and ought to be spent on recurring and non-recurring expenditure for the institution. This is not always done. The main item of recurring expenditure is the salary of the staff. The salaries of the College Teachers have gone so low in recent times that the right type of persons are not likely to be attracted to this profession in future. If this happens, and it has already happened in many cases, the foundation of higher education will be weak and the

advantages which the country would legitimately expect will be lost. Unfortunately the outlook regarding the qualifications, status and work of a College Teacher has been governed partly by the examination system of our Universities and partly by the supply of highly educated persons seeking such work overrunning the demand. The examination system puts a premium on coaching of students, and discounts all higher work on the part of teachers. They are confined to certain text books in their subjects beyond which they need not go, because it does not pay to do so either to them or to their students. The students believe in somehow passing the examinations on the margin and not in obtaining knowledge of any subject as such. The number of educated young men who have obtained good degrees either in India or from foreign Universities has increased in recent years. The reason why they seek employment in colleges is not that they want to pursue a scholastic career in all cases: in many cases they have no other alternative, as the avenues of employment in the country for people with high academic distinctions are limited on account of various The need for such persons is often exploited and they have to work as teachers in colleges on what may be called subsistence salaries. It is obvious that one cannot expect proper work from men placed under such circumstances and they invariably look out for more remunerative type of work at the earliest opportunity: or supplementary sources of income in any case.

Besides it is not difficult to find instances in which the persons on the staffs of colleges possess minimum qualifications and have no inducement to do good work. They simply carry on somehow. With this tendency in the personnel of our College Teachers, the basis of higher education has become weak and must therefore be prepared to face the fact that the average graduate turned out by our Universities is a man of poor calibre, limited outlook and often fit for nothing. If we visualise the colossal loss to the country in the form of the waste of time and energy of the best youth of the country at the best period of their life in Colleges, when they are drudged through the examination for a pass degree by the type of teachers referred to above, we shall immediately see the urgent need for a radical change in the existing system.

This must not be construed to mean that we do not have good Teachers in Colleges and good students. But these are exceptions, and they are there in spite of the system which hampers their work and provides little or no stimulus.

If the leaders of thought in the country are really sincere about the future of the country, they should immediately set about thinking ways and means by which this evil in our educational system can be eradicated without any loss of time. Immediate steps must be taken to see that the status and remuneration of the College Teacher is raised, that his profession is made more attractive and is respected by all classes of people, and that he is enabled to do his best to raise his own standard of learning in his subject and that of his students. Not even the best syllabus in any subject to be found in our University calendars will be of any use, unless the persons who are expected to deal with it are of the right type. And this cannot be achieved in the present circumstances.

The chief point of attack is to see that the commercial spirit in the running of our Colleges is abandoned. This can be done only by having large endowments from which the expenditure of the Colleges can be met. The fees will always be a receipt which will help to reduce expenditure. But the excess expenditure must be met from sources, which are fixed and permanent, and independent of the whims of third parties. Grants from Government of adequate amounts under present conditions are not likely to be forthcoming. Even if they do, they are likely to fluctuate with the fortunes of the Government. Permanent endowments alone can solve the problem. We have many charitable trusts whose resources are being used for less important purposes. Legislation should be passed to divert them for endowments for higher education. At the same time donor who have funds to give in charity should be persuaded to give suitable endowments for collegiate institutions.

In this connection the Hon'ble the Raja of Chettinad has set a noble example by donating a large sum for the benefit of the Annamalai University. It is to be expected that his foresight and generosity will be imitated by all those who have been favoured by fortune. It is a fitting tribute to him that this Commemoration Volume should be presented to him by admirers on the day on which he completes his 60 years.

SOUTH INDIAN MUSIC

By

TIGER K. VARADACHARI

The entrancing power of real Music is universally admitted. Even the child that sleeps in the cradle is lulled to sleep by the sweet tunes of its beloved mother. The cows, and the venomous cobra are enticed by captivating tunes. In Perunkathai, one of the minor Tamil classics we read of an wild elephant in rut being appeased by the melodious strains poured forth from a guitar. In the Pattuppattu of Tamil literature we read of highway robbers who let go their victims unmolested being overpowered by the chorus of divine music. Who does not know of the sweet melody of the magic flute of Sri Krishna, which made the Gopis of Brindaban forget themselves and dance to the tunes of the sweet music?

What then is the special virtue that is inherent in Music. It is often said that the whole world is musical or nathamayam and that music is nothing but natural sounds well-organised and well-tuned. Paranar speaks of the Lord that rules this Universe as "பாரோமும் பண்ணுப்ப் பாந்தான்" and Carlyle observes that Real Music can take us to the very edge of Heaven. Real Music tends to create love and devotion and this love tends towards amity among living beings. In the Tamil Periyapuranam we read that Amayanayanar's flute attracted even animals and that they actually forgot

their nature enmity for the time being, being overpowered by the naptimes effects of music.

This powerful music had been present in every age and clinic in the crude or refined form. Very good and ordered music existed in the Tamil land from times immemorial. It is often said that in the Samaveda we find the real basic elements of music. In the Tamil land we find that music existed from a very long time. Agastya is said to have written an elaborate treatise on Music. In Paripadal we have stanzas to which special poems have been allotted and one is likely to think that most of the Panars or bands must have sung their poems to the accompaniment of the lyre. It will be curious to note here that the fine natural divisions of the Tamil land viz. mullai, kurinji, palai, marudam and neydal had each its own yal as well as the pan suited to it. The wandering minstrels and hords who corresponded to the Rhapsodes of Circeca were the recipients of very grand presents from their patrons and were held in high esteem.

In the 5th century B.C. we hear of the Natya-Sastra of Bharata. About the 2nd century A.D. we have the Tamil classic Silappadikaram which is a fine repository of materials concerning ancient music. In the Arrangerrukathai of this splendid work, we see profuse references to ancient works on music on Raga, Bhana and Tala. It is well-known that Isai which stands between Iyal and Natakat-tamil is a connecting factor between the two. In the above work we have some glimpses of the various dances, or Kuthus of the period and we are incidentally treated to the various kinds of musical instruments known as the Torkaruvi, Tulaik-karuvi, Narappukkaruvi and Kanjakkaruvi. Even the

minute details of the stage and its appertenances have been scrupulously given and the various combinations of the tunes have been dealt with. Here we do not have the Saptasvaras named after Shadja, Rishapa, etc., but we have in their stead the divisions known as Ulai, Ili, Vilari, taram, kural, tuttam and kaikilai. The swaras no doubt correspond in number but the identity of the above two divisions remains still a mystery. I can here suggest, however, that future researches of interested Tamil scholars who are themselves experts in Music may bring to light the real connection that exists between the Music of the age of Silappadikaram and the music of later days.

The next stage in the history of South Indian Tamil Music was reached when the Tevaram hymnists moved from place to place chanting their divine hymns wherever they went. Being great experts they were able to flood South India with their hymns well-tuned and adapted to the different poems. Each pan had its appropriate kattalais and a lady descendant of Tirunilakanta-Yalpanar, who set the hymns of Sambhanda in his yāl, actually classified the above pans. The insistence made by the Tevaram hymnists on the absolute necessity of singing their verses in their appropriate pans, reveals the fact that they were themselves masters in the art and that they were quite alive to the ennobling effects of music. Tirugnanasambhandar has styled by Sekkizhar as ''கானத்தின் எழுபிறப்பு'' or the embodiment of the seven svaras of Music. The Alwars too who flourished from the 2nd to the 9th century A.D. have contributed vastly to the growth of religious and devotional music. next stage in the history of Music falls in the 13th century which saw the publication of the Sangita Ratnakara by Sarangadara. This work has practically revolutionised music and has ever since stood as a clear exposition of Carnatic music. A commentary was written for this work in the 15th century, when Purandara Dasa the famous devotee poured forth his emotional verses. About the middle of the 16th century one Rama Amatya wrote his Swaramala Kalanidhi. Later on music was highly encouraged by the Naik Kings. Achyutappa Naicker had an able minister by name Govinda Dikshitar and Venkatamakhi the son of this Dikshitar wrote his Chaturdandiprakasikai and he is generally considered to have improved and reformed the 72 melakartas. Elaborate changes were made in the old conception of music and we may well say that modern music begins with Venkatamakhi Kshetragna was a contemporary of this musician.

The princes of Tanjore were liberal patrons of art and the royal palace of Sarfoji could boast of a number of Asthanavidvans both local and instrumental. In the later 18th and the 19th centuries many Zamindars and Matatipaties gave their best encouragement to Music of the Mutts special mention must be made of Tiruvavaduturai, Dharmapuram and Tiruppanandal and of the Zamindaris Ariyalur, Ettayapuram, Ramnad and Marungapuri deserve special notice.

Of the instruments that were in vogue in ancient times the yāl deserves special attention: The full length of a yāl string was divided into 22 srutis. The characteristics of srutis have been well depicted in old works and the three pitches known as Mandaram, Madhyana and Taram have been well dealt with. The interaction of swaras has been well described and the same methods

of creating the various rasas through different tunes could be seen in them. "Moreover, we can see different ragams or pans allotted to the different parts of the day with respect to the different effects they were likely to produce on the hearer Marudam had been assigned to early morning and Sevvali to the evening tide."

Thus we see the development of music in all its various aspects in olden days. At present the Carnatic music is holding its sway and the musical compositions are mostly in Telugu or Samskrit. Sri Thyagaraja the prolific composer and divine musician departed this life in 1846 and his Keertanams are everywhere sung in Cutcheries and Kalakshepams. His illustrious contemporaries were Muthuswami Dikshidar and Syama Sastri. When Dikshitar was at Tiruttani, a sacred shrine dedicated to Muruga, he composed his famous Krithi known as "மாகஸ்குருகுகா" and even now his songs and Kritis are distinguished by the above words. He has been depicted as a performer of miracles and it is said that his Kriti அருந்தா மிருத்தர்ஷணி couched in the Ragam known as அமிர் தவர்ஷுணி actually brought forth rain when he was at Ettayapuram. He was a strict follower of Venkakumabhi.

It must however be said here that though Venkata-makhi recognised 72 melas based on the 12 notes of the gamut, not all these 72 melas were in constant use. Except the lakshana gitams there do not appear to have been compositions in all the 72 janakaragas. It is however satisfactory to note that the late Kotiswara Aiyer, the grandson of Kavikunjara Bharathi has composed some pieces for the 72 melas referred to above. This musician was my best friend and his attainments

were of a high order. He was good enough to consult me and I had the pleasure of suggesting some improvements in his compositions.

This short sketch of the history of music will be incomplete if mention is not made of that noble figure in the music world, Mahavaidyanada Aiyer. A born genius, he showed signs of his remarkable ability at a very early date and was styled Mahavaidyanada Aiyer even in his 12th year. Himself a musician of the highest order and his brother Ramaswami Aiyer, a great composer held their leading position for a number of years in the musical world and among his direct disciples we may mention Sabesa Aiyer of music fame. Patnam Subrahmanya Aiyer was a contemporary of this musical giant. Having had the privilege of his acquaintance I can speak with first-hand knowledge of some aspects of this musician. He used to practise music in the little hours of the morning. His songs were of the cultured type which involved great skill and effort. Akarasatakam was his special feature and his gamakas were of a very high order. When he took to singing thanams he was at his best. He has composed a good number of Kirtanas and they can be identified by the Mudra Venkatesa.

Poochi Aiyangar, the Samsthana Vidvan of Ramnad alias Srinivasa Aiyangar was the disciple of Patnam Subrahmanya Aiyer, one Raghava Aiyer of Coimbatore was another famous musician of the time and his disciples Pallavi Venu and Masilamani Mudaliar were also good musicians. Besides these we have had a splendid galaxy of very able musicians who had contributed greatly to the advance of Music.

At the beginning of the 20th century, a fear was entertained in some quarters that music had fallen on evil days. It is now very gratifying to note that every attempt is made to see that pure Tamil songs and Kirtanams are revived and that only Tamil songs are sung in public and private entertainments. It will be as clear as daylight that any individual could appreciate the songs quite well only if they are in his own mothertongue and that songs in any other language, however refined could not produce the same impression as songs in the mother-tongue. The Tamil language is very rich in these songs. The Tamilians were expert composers and singers and gave vent to their feelings pleasurable or painful by songs like கக்துகவரி, அம்மாளேவரி, குறவைப்பாட்டு and பிழக்காணம் songs mourning over the dead. Besides these we have had.

> " எற்றப்பாட்டும் இறவைப்பாட்டும் காவடிப்பாட்டும் கப்பற்பாட்டும் படையினெழுச்சியும் பள்ளி பெழுச்சியும் சிந்தமுஞ்சந்தமுர் திருத்தாலாட்டும் கல்லுளிப்பாட்டுங் கவணெறிபாட்டும் பாவைப்பாட்டுங் பலகறைப்பாட்டும் மறத்தியர்பாட்டும் குறத்தியர்பாட்டும் பள்ளுப்பாட்டும் பலகடைத்திறப்பும் வள்ளேப்பாட்டும் பிள்ளேப்பாட்டும்"

and other folk songs.

Coming to the major ones Arunachala Kavi's Ramanatakam, Kavikunjaran's Kandapuranam Kirtanai, Ramaswami Aiyer's Periyapurana Kirtanai, the famous pada sahityam of Subbarama Aiyer, Mathurakavi and others, the Pulliss, Kuravanjis and other songs are too numerous to mention and it is high time that every attempt to find them out and place them before the public

is made. The Tevaram hymns, Tiruppugazh, and Kanadiccindu have all of them their pans or the musical modes and I am sure that the present Renaissance will be responsible for the promotion and publication of similar songs.

Fortunately the lively interests evinced by Rajah Sir Annamalai Chettiar for the encouragement of pure Tamil songs has materialised in the shape of the Tamil Music Conference that held its sittings only a few days back. This Conference has passed resolutions which are very likely to improve the status and popularity of pure Tamil songs. I must congratulate myself on the excellent opportunity given to me by the Rajah of Chettinad of presiding over the College of Music for a number of years. I must acknowledge here the remarkable readiness with which he came forward to help the growth of music in this University by effecting then and there any improvements that were suggested from time to time. When one realises the extraordinary craving for music that is perceivable at present which, I fear, has culminated in a way in the degeneration of real ordered music, the efforts of a philanthropist like the Rajah Saheb will be conducive to the compositions of pure Tamil songs planned on the lines of real and wellordered music. A Kalavinodha of a high order his services to the sacred cause of learning and especially musical learning are unparallelled and I invoke the twindeities enshrined in Chidambaram to bestow on this Bhoja of the Tamil land and his family the long life and the choicest blessings. He has completed his sixtiethbirthday, May he live to see many more returns of his birth-day.

DIAMAGNETIC SUSCEPTIBILITY OF IONS By

P. S. VARADACHARI, M.A., M.Sc.,

AND

S. Sriraman, M.A., M.Sc.

ABSTRACT.

The aim of this article is to present a connected account of recent work on the magnetic susceptibility of ions. The influence of ionic interactions on magnetic properties is briefly outlined from the point of view of Van Vleck's paramagnetic term. Some emphasis is naturally laid on the connected investigations published from the Physics laboratory of the Annamalai University.

The molecular susceptibility of a polyatomic molecule without a resultant spin is represented by Van Vleck¹ by the formula

$$X_{mol} = -\frac{Lc^2}{6mc^2} \sum \overline{r^2} + \frac{2}{8} L \sum \frac{[m_0 (n^1; n)]^2}{h\nu (n^1; n)}$$

The first term is the well-known term of Langevin while the second is a paramagnetic term independent of temperature and is brought about by the distortion of the electronic system due to interatomic forces such as are obtained in diatomic and polyatomic molecules. A substance is diamagnetic or paramagnetic depending upon whether the first or the second term is larger.

Pauling², Stoner³, Slater⁴ and Angus⁵ have evaluated the atomic susceptibility of mono-nuclear ions by wave mechanical methods and hence the susceptibility of a complex ion or molecule could be calculated from the value of the constituents. However the disagreement between these calculated values and observed experimental values are quite definite and are very large in some cases. This is what one would expect from the fact that atoms when they combine bring about a distortion of the outer electronic orbits. The second term in

the Van Vleck expression gives the effect of such distortion on the magnetic susceptibility. According to Van Vleck such distortion would introduce a paramagnetic term and thus the susceptibility of a diamagnetic molecule or the ion concerned will be reduced.

It is evident from the foregoing that the paramagnetic term should vary with the different linkages in the molecule and any new constraints brought into play or any linkage that is loosened would have an effect on the distortion and hence on the susceptibility of the substance under consideration. Hence when a change in χ value is observed, one has to infer that there is a definite change in the electronic system of the molecule or ion.

This suggests that it would be possible to discover new constraints or linkages or a disruption of the same when a molecule is placed in a particular circumstance by evaluating the susceptibility of the molecule in that case. To give an example a mixture containing two types of molecules could be studied to find if there is any interaction between them which would show itself in the deviation that is exhibited from the additive law.

The interaction between molecules was studied over a wide range by observing the effect of temperature and dilution on organic liquids. Molecules with large dipole moments were chosen for the investigation, since the electrostatic field in such cases may have an effect on the superficial orbits of the molecules. In the cases of nitrobenzene, acetic acid and acetone no departure from additive law was observed which clearly showed that the interaction is quite feeble and is not sufficient in any case to distort the orbits appreciably. Even in the case of acetic acid and water where compound formation is definite

from viscosity and Raman effect data the susceptibility value is not affected. Hence if there is any departure from additivity one has to infer that a serious change has taken place in the electronic system. With this background an attempt is made in this paper to make a systematic study of the changes that take place when different types of salts are dissolved in suitable liquids.

When a salt is dissolved in a liquid, generally the binding in the solid state is broken off and new constraints are brought about because of the attachment of solvent molecules to the different ions of the salt. The change in susceptibility that ought to be expected therefore when a salt is dissolved in a liquid is due to the difference in the paramagnetic term in the solid state and in the state of solution.

It has been found that in general, a salt has a greater susceptibility in the state of solution than in the solid state. Table I gives the susceptibility of some simple salts in the solid state and in the state of solution.

TABLE	I.*					
Specific						

No.	. Substance.	susceptibility.			v v	A43
			X _S Solid	X D Solution	$\chi_{D} - \chi_{S}$	Author.
1 2	Sodium chloride Potassium chloride	••	.5150	.5270 .5310	.0120 .00 6 7	Hocart7
3 4	Calcium chloride Sodium formate	• •	.7147 .3667	.7291 .3691	.0144	Rao and
5	Barium formate		.2929	.2946	.0017 .0031	Sriraman8
6 7 8	Calcium formate Sodium acetate Barium acetate	• •	.4584 .3661	.4620 .3679	.0036	** ** **

It is seen that there is a small difference in the susceptibility value in the two states, the value in the state of solution being slightly greater in all cases. The difference has been explained by Weiss⁹ as being due to

[•] All values of χ in this paper are to be multiplied by 10^{-6}

deformation produced in the ion in solution. Assuming that changes in diamagnetic susceptibility are only half as sensitive as refractivity, a correction has been applied to the ionic values from experimental values of refractivity. While it should be conceded that the asymmetric nature of the field in a liquid produces a distortion, its effect would only be to diminish the diamagnetic susceptibility and not to increase it. Moreover it has been already observed that the effect of such a symmetry in the field does not produce any marked changes in the value as evidenced by the constancy of the susceptibility over a wide range of temperature in the case of nitrobenzene for which the anisotropy of the polarisation field changes with temperature considerably.10 observed effect therefore must be explained by the depolymerization of the complex water molecules on introducing an electrolyte into it.

It is well known that water contains the two polymers di-hydrol and tri-hydrol in great abundance at ordinary temperatures.11 It has been possible to calculate the susceptibility of the two polymers from their relative abundance at different temperatures and the susceptibility of water at these temperatures.12 It is found that the susceptibilities of both the complexes are smaller than that of the simple molecule just as one would expect from the foregoing considerations. Hence a greater abundance of the simple molecule due to the splitting up of the complexes would result in an increase over the additive value. A progressive heating would produce an increase in the x value due to a correspondingly greater proportion of the complex breaking into simpler ones until finally a temperature is reached at which there are no more polymers to be disrupted. When such a stage is

reached the χ value would also remain constant even on further heating. This value would therefore correspond to the sum of the susceptibilities of the ion and water in the simplest state and hence the ionic susceptibility could be calculated from the known value of water containing only the simplest type of molecule. Cabrera and Fahlenbrach¹³ have found that at 120° C. the χ for water attains the maximum value which corresponds to this simplest state. In the calculation of ionic susceptibility, this maximum value for water should be taken and that value of the solution which does not alter on increase of temperature must be used. Failure to take account of this fact may result in an error of as much as 4% in the ionic susceptibility.

Table II gives the susceptibilities of H₂SO₄ and some salts specially chosen for their homopolar nature. An examination of the table reveals that in the case of other compounds except HgCl₂ and H₂SO₄ there is a large change in the χ value on solution. It is well-known that the halides considered here have nearly coavalent linkages between the anion and the cation which therefore would produce a large distortion in the superficial orbits of the anion. The susceptibility of the salt is TABLE II.

Specific susceptibility. $\chi_{D} - \chi_{S}$ Solvent. Author. No. Substance. $\mathbf{x}_{\mathbf{s}}$ $\chi_{\rm D}$ Solution Solid .397 Varadachari14 .387 .010) 1 Sulphuric acid Subramanian15 .014 .425 2 Cadmium chloride. .411 .029 } Water. 3 Cadmium bromide. .382 .411 .363 .066 Cadmium iodide297 .034 .340 Zinc iodide .306 .033) Methyl .382 .415 Cadmium bromide. .067 alcohol. .364 Cadmium iodide297 8 Mercuric chloride . .301 .301

therefore smaller than the sum of the susceptibilities of the two ions in the free state. On solution, however, in water or alcohol there is a partial disruption or at least a loosening of the linkage resulting in the anion becoming more free. This would mean a decrease in the distortion of the orbits and a corresponding reduction in the paramagnetic term. Hence in solution the diamagnetic susceptibility increases and tends to approach the value in the free state. Evidence is not wanting from Raman effect data¹⁶ which definitely shows a decrease in the intensity of the lines on solution.

H₂SO₄ illustrates an intermediate position between the salts of the type of NaCl and KCl on the one hand and the halides of cadmium, zinc, etc., on the other, the linkage between the SO₄ ion and hydrogen being less covalent than in the latter group. Hence the change that is found in this case is smaller than the halides considered. In fact as the concentration of the acid in aqueous solution is varied definite minima are observed corresponding to the formation of complexes with water at definite molecular proportions.

HgCl₂ is an illustration of the principle that so long as there is no dissociation of the molecule there is no change in the susceptibility despite the presence of the solvent molecules surrounding the solute molecules. Further since there is no dissociation the polymers are unaffected and hence the effect observed in Table I is entirely absent. In such cases therefore the susceptibility of the solution is that given by the additive law. Raman effect data also support such a conclusion since there is no alteration in the intensity of the Raman line on solution, the covalent bond being too strong to be broken up by the dipole of the solvent.

Fajans¹⁷ has shown that the deforming power of a cation is large when its size is small and its charge is

great. On the other hand anions suffer greater deformation when their size and charge are both large. idea finds verification in the changes that are observed as we go from chlorides to iodides where there is a progressive increase in the size of the ion. When a cation combines with an anion to form a molecule, the susceptibility of the latter is the sum of the susceptibilities of the constituent ions when there is no distortion in any of them. If the same cation combines with different halogen ions it produces greater deformation in the larger ions and hence the susceptibility of the anion on combination is smaller than its value in the free state. Hence the difference between the susceptibility of the molecule and the sum of the susceptibilities of the constituent ions becomes larger as the size of the anion and hence the magnitude of the distortion increases. When the molecule disrupts in solution there is a release in the constraints and hence an increase in the susceptibility, this being more pronounced as we proceed from chlorine to iodine.

Table III exhibits a study of iodic acid and its salts wherein a large change in susceptibility results on solution. Such a change is only to be expected from the fact that the iodate ion is very large in size and hence easily susceptible to deformation.

TABLE III. Specific

No.	Substance.			ecinc ptibility.	X _D -X _S	Author.
		•	X _S Solid	$\chi_{ m D}$ Solution		
1	Iodic acid	• •	. 2667	.2352	0315	Rao and Sriraman8
2	Lithium iodate		.2661	.2298	0 363	,,
3	Potassium iodate		.2785	.2617	0168	**
4	Sodium selenite		.2990	.3442	+.0452	••

The Raman spectra¹⁸ of iodic acid and its salts in the solid state and in solution have been studied by

Venkateswaran. The acid in the solid state exhibits a number of Raman lines the more prominent of which have the frequencies 1397, 1249, 782, 713, 633, 377 and 328. In fairly dilute solution the first two lines disappear completely and the frequencies 713 and 782 produce a broad diffuse band. The higher frequencies mentioned are entirely due to HIO3 molecule which disappear in dilute solutions. This incidentally shows that the linkage between the hydrogen and the iodate ion has to be regarded as homopolar which on disruption would increase the diamagnetic susceptibility. The broad band at approximately 779 would indicate because of its breadth and diffuseness the formation of complex ions such as I₂O₆ which also finds evidence from chemical This polymerization which shows itself in the formation of the band accounts for the large deformation which is produced on the iodate ion in solution. would result in a decrease in the diamagnetic susceptibility in solutions.

We have therefore two opposing influences to consider (1) the dissociation of the molecule (rather feeble) which results in the increased diamagnetism and (2) the polymerization and formation of complexes which would reduce the diamagnetism to a large extent particularly because of the large size of the ion. The latter however predominates and hence a net reduction in susceptibility value results. This explanation applies to a varying degree to its salts and their solutions.

The case of sodium selenite is peculiar in that solution brings about a change in the valency of the selenious ion. It is possible to calculate the susceptibility of selenious acid and sodium selenite from the known ionic values assuming the valency of 6 for selenium. The

experimental values agree with the calculated value for the solids. In solution, however, a change in the susceptibility of the salt is observed which could be accounted for by assuming a change in the valency of selenium from 6 to 4 on dissolving the salt in water. Such an assumption is justified by Raman effect data.¹⁹

Thus a study of diamagnetic susceptibility of different types of salts both in the solid state and in solution gives us an insight into the nature of the linkages involved and also the mechanism of solution in general. The formation of complexes and their relative abundance could be inferred with a fair degree of certainty. It is also possible in favourable cases to discover changes in valency and to decide between rival constitutional formulae.

REFERENCES.

- 1 Van Vleck: Theory of electric and magnetic susceptibility, p. 275.
- 2 Pauling: Proc. Roy. Soc. 114, 181, 1927.
- 3 Stoner: Proc. Leeds Phil. Soc. 1, 484, 1929.
- 4 Slater: Phys. Rev. 36, 58, 1930.
- 5 Angus: Proc. Roy. Soc. 136, 569, 1932.
- 6 Rao and Varadachari: Proc. Ind. Acad. Sci. 1, 77, 1934.
- 7 Hocart: Comp. Rend. 188, 1151, 1929.
- 8 Rao and Sriraman: Phil. Mag. 24, 1025, 1937.
- 9 Weiss: J. de Phys. 1, 185, 1930.
- 10 Rao: Ind. Jour. Phys. 3. 21, 1928.
- 11 I. R. Rao: Phil. Mag. 17, 1113, 1934.
- 12 Varadachari: Annamalai University Journal, 5, 18, 1935.

- 13 Cabrera and Fahlenbrach: Zeits. f. Phys. 82, 759, 1933.
- 14 Varadachari: Proc. Ind. Acad. Sci. 2, 161, 1935.
- 15 Subramanian: *ibid*. 4, 404, 1936.
- 16 Venkateswaran: *ibid.* 1, 850, 1935.
- 17 Fajans: Radio elements and Isotopes etc. 1931, pp. 74-91.
- 18 Venkateswaran: Proc. Ind. Acad. Sci. 2, 119, 1935.
- 19 *Ibid.* 3, 533, 1936.

WOMEN'S RIGHTS IN THE PERFORMANCE OF DHARMA

By

T. VENKATARAMA DIKSHITAR, SIROMANI AND VISARADA.

Before proceeding to the subject proper, let us understand the significance of the word Dharma with which we are concerned here. The words Dharma, Sri and several others are so rich in significance that they cannot be rendered satisfactorily into other languages. We have got different meanings for the word Dharma according to different systems of Philosophy.

The special significance of the word Dharma with which we are concerned here has been explained by Jaimini, the Sutrakara of the Purva Mimamsa system, by the Sutra चोदनारुक्षणोऽश्रों धर्मः—Dharma is the cause of good and not of evil, having Vedic injunction for its sole authority. Sabaraswamin, the Bhasyakara of the P.M. Sutras, has explained the word चोदना, thus: चोदना is any vedic injunction which urges men to any particular action. From the word आहु: it is clear that even the Bhasyakara follows the traditional meaning of the word चोदना, It may predicate a याग (sacrifice), दान (giving) होम (offering) and the like.

याग and होम have been defined by Jaimini. The याग enjoined by Vedic injunction consists of sacrificial materials, Gods and the action त्याग.²

1. चोदनेति क्रियायाः प्रवर्तकं वचनमाहुः Sabaraswamin on P. M. S. 1-1-2. 2. जै० स० 4-2-27. A होम 3 is that in which in addition to the constituents of a याग, there is प्रक्षेप offering oblation into the fire.

दान has been defined by Sabaraswamin as the transfer of one's ownership of a thing to another. In all these three varieties of धर्म, the idea of giving up (उत्सर्ग) is a common factor.

No one will have an inclination for the performance of Dharma, unless he is aware that it will produce the desired reward. It has been established by Jaimini⁵ that, in injunctions like⁶ 'one desirous of Heaven, should perform the ব্যাপ্তামান sacrifice', Svarga is that which is to be attained (মাখ্য) and যাম the means of its attainment (মাখন). Svarga is the desired object which naturally prompts the man to achieve it.

Now let us consider whether all beings—men, animals and Devas—are entitled to perform Yaga. Jaimini has decided that everyone who can perform খাগ with all its accessories (স্ক্র) is entitled to do it.⁷

Gods cannot perform sacrifices; for, firstly there are no other higher Gods for them to worship and secondly they have no corporal existence.8 আন cannot be made

- 3. जै० स० 4-2-28.
- 4. On 30 4-2-28.
- 5. अधि 6-1-1.
- 6. दर्शपूर्णमासाभ्यां खर्गकामो यजेत ।
- 7. जै० स० 6-1-5.
- 8. पूर्ण भीर 9-1-4.

in favour of one's own self and without আদ, there is no sacrifice. The statements such as Gods performed सत्र sacrifice' are only arthavadas. The nature of praise involved in this is that even the Devas who have accomplished their objects, performed sacrifices and that it goes without saying that men of knowledge shall perform sacrifices.

Animals also desire pleasure. When they are tortured by heat, they resort to shade. When they are distressed by cold, they resort to sunshine. Not only this, animals have a desire for a reward even in the next life. Dogs^{9a} are said to observe a fast on the fourteenth day of the fortnight and hawks on the eighth day. these facts, we cannot conclude that animals have a right to perform Dharma. They have no knowledge of the Veda. The performance of Dharma requires a proper understanding of the Veda. They cannot understand that a particular sacrifice will lead to a particular reward either in this or in the other world. Their observance of fasting must therefore be due to some other causes such as disease. Apart from this, they have no wealth which is essential for the fulfilment of याग. evident that neither Devas nor animals are entitled to the performance of Dharma.

Now let us examine whether women also have a right in Vedic rites. ऐतिशायन says¹⁰ that only males who

- 9. देवा वे सत्रमासत.
- 9a• ग्रुनश्चतु र्दश्यामुपवसतः पश्यामः। श्येनांश्चाष्टम्याम् । Sabaraswamin on जै० सू० 6-1-4.
- 10. पूर्ण मीरु सूर्ण 6-1-6.

are desirous of Heaven are entitled to perform sacrifices. He bases his arguement on the masculine gender found in the word खर्गकामः.

Another objection also is raised. Dharma can be fulfilled only with substances such as बीहि and Without wealth, these articles cannot be obtained. Women are neither mistresses of their fathers' property nor of their husbands', because they are sold away by their fathers and purchased by their husbands. olden days during the period of marriages some valuables such as 11 a pair of cows were given to the fathers of the brides. As they are themselves property, they cannot be the owners of wealth. They may even earn money by spinning, tailoring and by other similar work; but they have no right even over this money, because it is stated in a Smrti12 that the wife and others have no property and whatever is earned by them becomes the property of him to whom they belong and that on these grounds women have no independent right in the performance of Dharma.

These arguments will not stand scrutiny. In connection with the status of women, Jaimini says¹³ that in the opinion of Badarayana all—without any distinction of class, including women—desirous of rewards have the right to perform Dharma. Jaimini expresses his own view supporting that of Badarayana for whom he has

- 11. आधें गो मिथुनं । शतमतिरथं दुहितृमते दद्यात् Sabaraswamin on P. M. S. 6-1-10.
- 12. भार्या दासश्च पुत्रश्च निर्धनाः सर्व एव ते। यत्ते समधिगच्छन्ति यस्य ते तस्य तद्धनम्॥
- 13. जै० सू० 6-1-8.

special reverence. When we say 'man is mortal' it also signifies the mortality of woman. Similarly, the word सर्गकामः includes all individuals without any specification of sex.

Apart from this, the desire for obtaining a reward is as strong in women as in men. It is only on the authority of Smrti that women are declared to have no property. The Sruti 'योत' urges everybody to perform Dharma. If there is a contradiction between Sruti and Smrti texts, the superiority of Sruti over the Smrti has been established by Jaimini.¹⁴ Therefore in this case, discarding the authority of Smrti, we conclude that women are entitled to own money and to perform Dharma.

The Smrti which says that the wife has no property should be understood to prohibit independent financial transactions. Such transactions may lead to difficulties and complications. Therefore the Smrti restricts her independence only in respect of financial transactions.

Now we have to meet the objection that a bride is purchased by her husband and that she is herself property. If a pair of cows is the price of a bride, the price should vary according to her beauty and quality, just as the price of a commodity in a market varies according to its qualities. As the offer of a pair of cows is uniform, we have to admit that this offer is only a religious formality.

The very word पत्नो indicates that she has a right in the performance of Dharma. This word has been derived by Panini's Sutra¹⁵ from the word पति meaning

> 14. P. M. Adhi. 1-3-2 15. पत्युनों यज्ञसंयोगे पा॰ सू॰ 4-1-83.

proprietor. Unless she has a right to the reward that accrues from a याग, the word पत्रा will not be significant.

The বাঁবিথৈপুনি also says¹⁶ 'A wife is certainly the mistress of the household. The husband shall make an offering only with the permission of his wife.'

Thus it has been established that a woman can have property and an equal right with her husband in the performance of Dharma.

The next question arises whether the husband and wife may perform the AN separately or should do it jointly. It may appear at first sight that the wife also has independent right.

We have reasons to admit the joint rights of the couple in the performance of Dharma. In sacrifices ghee has to be purified by the couple by seeing it. This आउयावेक्षण is an अङ्ग of the sacrifice. If they have separate rights in याग, it will not be possible to have the ghee purified by the couple.

- 16 . पत्नी हि पारीणह्यस्येशे पत्नियैवानुमतं निर्वपति तै॰ सं 6-2-1.
- 17. परन्यवेक्षितमाज्यं भवति, यजमानावेक्षितमाज्यं भवति ।

individually by either of them, the sacrifice becomes defective by the absence of an अक. Then the sacrifice itself will not become effective.

Another reason also can be assigned in favour of joint rights in সামকন . Partition between husband and wife has been forbidden. Her status as wife enables her to have proprietory rights even over the property earned by her husband. If either of them does not desire to perform a sacrifice, the বাগ which is an essential part of বাগ cannot be performed. Therefore sacrifice shall be performed jointly and বাগ shall be made together.

The Smrti definitely says¹⁹ 'A woman should not be ignored in the performance of धर्म, अर्थ and काम. All religious acts shall be performed jointly.'

Another Smrti says²⁰ 'Commencing from the time of marriage unity should be maintained in sacrifices and their rewards.'

The Vedic text says²¹ 'A wife reaps the fruit of good actions along with her husband. They both bear the yoke of a sacrifice. Being of one mind, they overcome their enemies. They attain the unfading light in the celestial world.

- 18. न भर्त्रा सह विभजेत।
- 19. धर्मे चार्थे च कामे च नातिचरितव्या । सह धर्मश्चिरतव्यः ।
- 20. पाणिप्रहणाद्धि सहत्वं कर्मेसु, तथा पुण्यफलेषु ।
- 21. संपत्नी पत्या सुकृतेन गच्छताम्। यज्ञस्य युक्ती धुर्यावभूताम्। संजानानी विजहतामरातीः। दिवि ज्योतिरजरमारभेताम्।

These texts undoubtedly point out that the wife has equal right with her husband in the performance of sacrifice and also in the enjoyment of its rewards.

If joint right is admitted, the singular number conveyed by the affix in यजेत may appear incongruous. Here we have to view the agentship (कर्त्व) of husband and wife in a sacrifice as indivisibly one and it belongs to both (व्यासक) as देवतात्व of the Gods आग and सोम in the अमोबोमीययाग.

This joint right is restricted only with regard to श्रोतकर्म where Vedic mantras dominate; because women have been prohibited from the study of Veda for various reasons. Every woman has got an independent right with regard to दान and पूर्व even during the life-time of her husband. Even after her husband's death, she is entitled to perform दानः and पूर्व. विज्ञानेश्वर has established by the application of द्वयो प्रणयन्ति न्याय²², the widow's right to succeed to the property of her husband who lived separately from his brothers.

It has already been stated that a woman can earn wealth by spinning and other similar work. याज्ञवस्क्य ²³ has clearly stated the various sources of wealth to women.

- 22. qo मी 7-3-7.
- 23. पितृमातृपतिश्रातृदत्तमध्यम्युपागतम् । आधिबेदनिकाद्यं च स्त्रीधनं परिकीर्तितम् ॥ 143 धन्भुदत्तं तथा शुल्कमन्वाधेयकमेव च ॥ याञ्च्यवः । 144

বান on auspicious occasions to deserving persons has been highly praised in Dharma Sastras. মুর্ন has been elucidated by নানুকা. It is an act of pious liberality such as sinking of wells, construction of pleasure lakes, tanks and temples, giving of food and creation of temple gardens. It has been said that one who performs sacrifice attains নাম But one who does মুর্নকর্ম is said to attain নাম also.

So far it has been proved that the wife has got joint right with her husband in the performance of आतकन and independent right in दान and प्रकृत. It has also been proved that a woman gets property through her father and other relatives on some occasions and she has an equal right over the property earned by her husband.

These facts prove that in ancient times women were given equal status and independent position in religious and household affairs. Some Smrti texts which check the freedom of women are intended for the maintenance of their chastity which Hinduism considers a priceless possession for the fair sex.

Woman's tenderness of heart and ready sympathy for human suffering have made दान and पूर्त, their favourite forms of धर्म, and the world owes to women some magnificent deeds of charity. Even more often they have been the inspirers of such deeds on the part of

- 24. वापीक्रूपतडागादिदेवतायतानि च । अन्नपदानमारामाः पूर्तमित्यभिषयते ॥
- 25. इप्टेन रूमते स्वर्ग पूर्च मोक्षञ्च विन्दति ।

their male relations who have associated their benefactions with their loved ones. One recalls in this connection the Kalyani and Kamala Nehru hospitals. But why go so far? On the happy occasion of the पद्यान्त्रपृतिमहोत्सव of Raja Sir Annamalai Chettiar, one is reminded of the three Sri Minakshi Colleges, including the Samskrit and Tamil Colleges, which that Prince of Charities established in memory of his beloved mother whose name is identical with that of the Goddess of Madura, and which have blossomed into the Annamalai University.

Long Live Raja Sir Annamalai Chettiar and his family and Long Live the Annamalai University.

मक्कं दिशतु नो विनायको मक्कं दिशतु नस्सरस्वती। मक्कं दिशतु नस्समुद्रजा मक्कं दिशतु नो महेश्वरी॥

THE BRITISH EMPIRE IN A CHANGING WORLD

By

V. R. VIRAMANI, B.A., (Hons.), Lond.

The British Empire as we know it to-day is substantially the creation of the 19th century. While the Mother country moved towards democracy by slow and easy stages the British communities which developed in Canada, Australia and Newzealand were democratic Throughout the first half of the 19th from the first. century an aristocratic ruling class was responsible for Imperial relations and those relations were by no means easy or amicable. In the Mother country it was generally assumed that colonial self-government was a half-way house to independence. Self-government was readily granted, but independence did not follow. In the history of Canada the great landmark was Durham's Report. Lord Durham advocated the union of Upper and Lower Canada and the grant of full responsible government. A Canadian ministry was to be formed representing the strongest party in the Canadian Parliament exactly on the lines of the British Cabinet. The British Governor appointed by the King was to assume a neutral position outside party politics; a position akin to that of the King of Great Britain. It was not till 1846, when Lord Elgin became Governor-General, that this materialised. Australia too was given self-government and the right to draft its own constitution. In the course of the next twenty-five years Cape Colony and Newzealand were given the same rights. It must however be noted that the Colonial Reformers in conferring the benefits meant

them to apply only to domestic affairs in the colonies. They meant to exclude from them the enactment of tariffs and the disposal of unoccupied lands. These, they held, were general interests of the Empire. But no statute limiting the powers of the self-governing colonies was ever enacted and the fiscal limitations were never imposed. Thus, the wisdom or indifference of those who expected the ultimate independence of the colonies co-operated with the zeal of the colonial reformers in opening the way to the modern system.

By 1860 a further step was taken. (Great Britain in the meantime had adopted Free Trade). Canada and four of the Australian colonies had secured self-government including the right to levy tariffs on goods from the Mother country. In 1857 Canada formed itself into a Federation which the Mother country ratified. Thus with curious suddenness came Modern Imperialism. Imperialism was first and foremost an emotion. a shock of delight the men of 1880 rediscovered the British Empire. They began to take pride in the marvellous achievement which had brought one quarter of the population of the earth into a single fellowship of peace. They saw themselves as citizens of something far wider than a little nation-state concentrated exclusively on the pursuit of the own interests. Regarding the Empire no longer with complacency but with dismay the dissolution of this august fellowship, they set themselves to give greater reality to the haphazard and accidental bonds by which alone it seemed held together." Many causes contributed to this change. The future seemed to be with the great military powers. and Germany were becoming rivals to the British for the possession of colonies. The scramble for Africa began though it was luckily settled without recourse to war. The Reform Bills at home drove the Mother country to the side of her democratic colonies overseas. Aristocracy was being rapidly merged into the plutocracy of big business. Joseph Chamberlain was the spokesman of this big business. Capital and industry increasingly demanded tropical products as raw materials and new markets for their surplus production. Imperialism offered a way to both. Citizens of the self-governing British dominions after escaping from the control of the British government had at last found in their common allegiance to the Crown the best expression of the membership of world-wide Empire.

Imperialist policy took two forms; expansion and close unity. The first resulted in the conquest of the Transvaal, the opening up of Rhodesia and the acquisition of Nigeria, Kenya, Uganda and the Sudan. On the other hand, the attempt to formulate a scheme of Imperial Federation ended in total failure. Equally barren was Joseph Chamberlain's policy of an Imperial Zollverein or Customs Union launched in 1903. The British Government was not prepared to abandon her Free Trade system which this would involve. Liberal opposition raised the cry "your food will cost more" and the 1906 elections saw the death of the Meanwhile, accident gave the British a Zollverein. method of adjusting Imperial relations. At the Jubilee of Queen Victoria in 1887, the Prime Ministers of the colonies were present and the Colonial Secretary held an informal meeting of these ministers. In 1897 at the Diamond Jubilee of the Queen this was repeated and a third conference followed in 1902. In 1901 the Australian Colonies had federated into the Australian

Commonwealth. The main scope of these conferences was only discussion. No decision could bind the various ministers assembled. The South African war also had taught the British that they could have the colonies not at the point of the pistol but by "close affection that grows by common names, from kindred blood, from same privileges and equal protection. These articles which though light as air are strong as links of iron."

The Imperial Conference of 1907 discussed Imperial defence, and a system of uniform organisation for the forces of the Dominions and Great Britain was established. Australia and Newzealand adopted universal military training. When the Great War came in 1914 the self-governing dominions rendered every possible service to Britain. It falsified one of the confident hopes of Germany that the British Empire was a mere fiction, that Canada and Australia were independent nations, as indifferent to the welfare of Britain as the United States of America, that India was only longing for an opportunity to escape from British rule. misgivings were shared to some extent even by British politicians, notably Lord Morley. But the Empire did not disappear. Gallipoli will always be a sacred, even a tragic, memory to Australia and Newzealand. Canadians served on the Western front. Botha and Smuts in Africa rendered yeomen services and India contributed the largest share in men and money.

This impressive demonstration of the loyalty of the Dominions to the common cause rekindled the hope that some form of Imperial Federation might be brought about as a consequence of the War. On the other hand, to the Dominions the War was a sort of 'coming of age.'

In the pride of their achievements on the battlefields of Europe they realised that they were indeed independent nations each with a great destiny in the world. place that their statesmen found on the Imperial War Cabinet gave them hopes of treating with Britain as independent nations. In fact the Empire had become the British Commonwealth of Nations. This fullgrown manhood of the Dominions was fully illustrated at the Peace Conference in 1919. Canada demanded separate representation for herself and got it. The Treaty itself was signed separately by the Prime Ministers of the Dominions also. These ministers in turn submitted the Treaty to the Dominion Parliaments for ratification. This was recognised by the League of Nations. Canada was elected a member of the League Council.

Before the War it was recognised that the Dominions, though self-governing, in all other respects, accepted implicitly the lead of Great Britain in foreign policy. Now, each Dominion claimed the right to pursue its own foreign policy. Canada and the Irish Free State (born in 1921) appointed ambassadors at Washington to transact their own foreign relations with the United States of America. The threat of war between Great Britain and Turkey in 1922 brought forth an important declaration from the Prime Minister of Canada. He said "Under our system of responsible government, the Canadian Parliament should determine, except in the case of threatened or actual invasion, whether the country should participate in wars in which other nations or other parts of the British Empire may be involved." Clearly an Empire of which one part could decide to be at peace while the rest were at war was a political organisation unknown to history.

These problems were then discussed at the Imperial Conference of 1926. On the initiative of Lord Balfour the following conclusions were unanimously adopted. "The Dominions are autonomous communities within the British Empire, equal in Status, in no way subordinate one to another in any respect to their domestic or external affairs, though united by a common allegiance to the Crown and freely associated as members of the British Commonwealth of Nations." This was not all. The discussions of 1926 were resumed in 1930 and practical shape was given to these conferences in the Statute of Westminster in 1931 which for all practical purposes is the last word on the relations governing the Empire and the Mother country. It made clear the powers of the Dominion Parliaments and was intended to promote the free cooperation among members of the British Commonwealth of Nations. Section 3 of the Statute runs:—The Parliament of a Dominion has full power to make laws having extra-territorial operation."

Section 4 says:—" No Act of Parliament of the United Kingdom passed after the commencement of this Act shall extend or be deemed to extend to a Dominion as part of the law of that Dominion unless it is expressly declared in that Act that the Dominion has requested and consented to the enactment thereof."

So, the present position of the Dominions is that they are practically independent states except for one reason. As other links of Empire have been removed one by one, attention has more and more been concentrated on the Crown as the point of unity in diversity, the symbol of that free association which is the essence of the Commonwealth. The Statute of Westminster still

further stressed the fact that even the title of the Crown has to be accepted by Dominion legislaion and it is a striking fact that the title of King George VI in the Dominions rests solely upon Dominion law. The Statute also puts an end to the controversies concerning the divisibility of the Crown.

In recent years the problem of Dominion neutrality has been discussed a great deal. The dominions of the British commonwealth share many of the characteristics of the European 'neutral group.' They are small powers incapable of defending themselves against aggression by any of the great military dictatorships. They have even less direct interest in the issues likely to give rise to an European war. They are all distant from Europe as well as disinterested in its more explosive immediate problems. Thus, regarded as separate sovereign State they face the problem of neutrality like the United States of America. But apart from the tremendous bonds of sentiment, blood and history and the exceedingly close economic bonds, they have an interest of national security that makes it practically impossible for them to be neutral as between Great Britain and any other foreign power. This feeling of helplessness is naturally galling to nationalistic sentiment in the Dominions. In Canada and South Africa this feeling has led to bitter controversies, over rights of neutrality and secession from the Commonwealth. Strangely enough, however, inspite of their desire to remain neutral, they followed the lead of Britain in imposing Sanctions on Italy, though they soon found out how futile it was. In the present great struggle though South Africa postponed its decision for a time

and then came in one of the side of Britain, the other Dominions were the first to mobilise. Hence the problem of neutrality is not a matter of principle but one of expediency and prudence. The Dominions are likely to decide on neutrality or active participation according to the situation in which they find themselves. Here, there need be no uniformity.

What then of the future of the Commonwealth? The history of the various Dominions offers different solutions. The interest of Canada in the colonial question is secondary and remote. Her affinity is to the United States, and she has realised the importance of her connection with the States by concluding a number of economic agreements. There is also a movement in Canada to cut her off from the practical restrictions which her union with Great Britain imposes. Therefore it follows that her future is inextricably bound up with the future of the United States of America. interest of South Africa, on the other hand, in the colonial question, is direct and immediate. It has to be noted that she is not connected with Britain by ties of sentiment and blood. The country has an overwhelmingly large Dutch population who have forgotten their native homes and have come to consider Africa their land. Nor has the Boer War been completely forgotten. No wonder then, if she has begun to talk in terms of secession. possession of Tanganiyaka and South West Africa has made her conscious of her power and she is determined to hold them against any encroachments of the European So the future of South Africa lies in the direction of complete independence and secession might again become a live issue. As regards Australia and Newzealand, they have not yet begun to revolt so openly

against even this nominal tie of the Crown, probably, because of their dependence on Britain for protection There is no doubt that Australia from foreign forces. fears Japan and without the aid of Britain her position might become hopeless. Thus Australia and Newzealand will probably remain longest within the The Irish Free State has already broken away. In all but name she is a republic. If she repudiates her connection with the Crown, which she might very well do, she too will have become a sovereign State. and the Crown colonies are fast developing a spirit of defiance. Indeed it seems that the present war will probably see India at least a Dominion, while the other colonies will correspondingly progress towards that status; for war is the most forcible of teachers. struggle whose watchword is freedom must bring greater freedom to those who wage it. The present war is bound to rouse the citizens to a more vivid consciousness and a keener sense of their national dignity. In any case unless brute force triumphs in Europe there is every hope that the war will bring political freedom to those who fight the battle for freedom.

THE LAW OF DEMAND

By

C. W. B. ZACHARIAS, M.A., L.T.

The modern formulation of the Law of Demand as given to us by Prof. J. R. Hicks in his latest work Value and Capital and some years earlier by Prof. Gustav Cassel in his Theory of Social Economy, marks a departure from the traditional Marshallian formulation in that it is done without the aid of the concept of marginal utility. Prof. Hicks replaces marginal utility by marginal rate of substitution and the law of diminishing marginal utility by the law of diminishing marginal rate of substitution, and carries out an analysis of demand' with the individual scale of preference as the starting point. This is done as he says, to remove from the analysis "all concepts which may be tainted by quantitative utility." The inspiration for this is admittedly derived from Pareto's use of indifference curves, though Pareto himself did not, even after the discovery of the new method, eschew the utility concept from his exposition. Prof. Gustav Cassel does the same thing on the ground that the law of diminishing marginal utility is an altogether formal law concerned with psychological processes and wholly unnecessary for the economic theory of prices.

The objection these theorists have is to the use of quantitative utility in Marshall's analysis of demand. In their view there is no valid method of measuring utility and perhaps not even the possibility of conceiving it quantitatively. So they attempt to eschew subjective elements altogether from their theory and having done that, they claim for it a superiority over the old. Now if it is true that the use of quantitative utility vitiates the law of demand, then it naturally follows that the concept of utility should be excluded from the analysis, and any theory which does that, is superior. So the central question that awaits examination is whether any justification can be found for Marshall's method of measuring utility. This paper is an attempt to conduct such an examination.

But first let us dispose of the question whether on general grounds a theory which contains subjective elements is necessarily inferior to the one which excludes them altogether. Now there cannot per se be any objection to the inclusion of subjective elements in an objective theory, provided it is possible to convert what is subjective into exact objective terms. When subjective elements really play a part, it is not by arbitrarily excluding them, but by honestly trying to convert them into objective terms that we get a true insight into phenomena. We cannot, therefore, take any formal objection to the introduction of the utility concept in the law of demand. As a matter of fact, a complete and satisfactory explanation of demand must take us right back to the psychological processes that lie behind human conduct. The supreme merit of the utility approach is that there is in it an attempt to relate objective human conduct in the market place to the end which it seeks to further. The attainment of satisfaction or utility is an end, final and ultimate in itself. It is an end in a sense in which the scale of preference from which the new

theorists start, can never be. It is idle to argue that human beings behave in a particular manner just because they desire to give effect to their scale of preference. The scale of preference and the particular conduct that is based on it are both mere instruments for the attainment of that end which lies back of them viz. the maximization of satisfaction. It follows then that an explanation of demand couched in terms of ends is, on the face of it, more acceptable than one that is based on a mere instrument. It is immaterial to this question whether the supposed ends are economic or non-economic. The end that the individual human being seeks to attain may be rational or irrational, economic or non-economic, instinctive, habitual or impulsive, but there must be an end towards which alone means can be directed. One may, for instance, believe with Prof. Robbins that there are no economic ends and yet ask for an explanation of demand in terms of ends, for that alone will give the fullest revelation of human behaviour. This reasoning implies that far from being an inferior theory, the utility theory of demand if it can be legitimately expressed in quantitative terms is the only satisfactory theory of demand.

The next question is whether there is the possibility of quantitatively measuring utility. To investigate this point, we have to submit the Marshallian method to a rigid examination. Briefly stated, Marshall's method is to measure the utility derived from the consumption of a commodity and to express the measurement in terms of money. Every individual is supposed to have a definite marginal utility of money, and that utility is used as the measuring rod to measure the utilities

that commodities yield. The question now is whether this is a satisfactory method. It we for the moment take for granted that there is a definite marginal utility of money for each individual, this method will be found to be quite legitimate and even admissible in a science which lays claim to objectivity. All the logical requirements of measurement are here fulfilled. Utility is measured in terms of itself as is done in all physical measurements. All measurements, physical or otherwise, will be found on reflection to be relative and based on arbitrary standards. Whether it is length or weight or volume or area that we measure, we do it with an arbitrary standard of length or weight etc., and express the measurement as a ratio. We do nothing more nor less than this when we measure utility with the marginal utility of money. And if the measurement of length or weight can be given a quantitative significance, there will be slender ground for refusing it to the measurement of utility. It may, however, be contended that since the marginal utility of money is different for different persons, it cannot be admitted as a valid standard. This objection does little damage to the measurement of utility, for if it is an objection at all it applies equally to all measurements. We may, for instance, ask whether the standard of weight or length when used by different people has an identical significance for them. Is it not true that a pound weight on the palm of a child of two is very different in the sense of weight it gives from the same pound weight on the palm of a grown up man 6'2" in height and 45" in girth? The subjective sense of weight of that which is used as a standard may be and will be different to different persons, but that does not vitiate its use as a measure, since objectively it is the same always. Similarly a unit of money though it has different marginal utilities for different people, can still be legitimately used as a standard, for the objective significance it has, viz. its purchasing power, is at a particular moment of time the same for all. It is because money has this double quality that it is eminently suited as a standard for measuring utility. Subjectively every person has a marginal utility for money which enables him to measure the utilities he has for other commodities. Objectively money has a purchasing power which is the same for all members of a community at a given moment of time. Thus it is possible to compare the money expressions of utility, one with another.

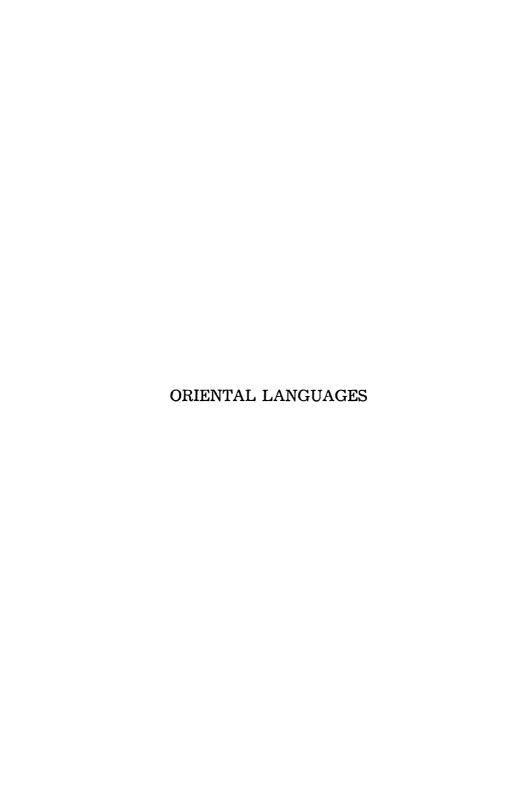
All this has been on the assumption that every individual has a definite marginal utility for money. This matters needs scrutiny now. Unfortunately here we do not receive much help from Marshall himself. Nowhere in his *Principles* has he undertaken a systematic exposition of the concept of marginal utility of money. The incidental remarks that he has made, do not give us a clear idea of what his notion of that utility was. He took it almost for granted, and did not give much attention to it, for it was so self-evident to him. However, we have to analyse it in order to find out whether it is really suitable as a standard of measure.

Money has no direct utility for man, but only an indirect or derived utility. That utility depends on the utilities yielded by the goods and services on which money is spent. If a person's income is given and the market prices of various commodities are known, and if we know also his manner of spending his income, the

marginal utility of money to him will be seen to be identical with the utility derived from the least important use to which money is put. That utility will be the marginal utility of income to him. The marginal utility of income is what he will habitually attach to every unit of money that he handles, so that it is immaterial whether we speak of the marginal utility of income or the marginal utility of money. From this it is clear that to derive the marginal utility of money, certain factors have to be given among which market prices figure prominently. It may on that account be argued with much plausibility that the utilization of this concept in formulating the law of demand involves circular reasoning. But this is not really so. We have here to distinguish between the original concept derived from given objective factors and the secondary fictitious concept that the human mind forges for itself. If the given factors exist unchanged for a good length of time as in the case of most persons they do, the marginal utility of money may to an individual come to have a significance apart from the factors from which it was originally derived, and as a secondary fictitious concept attain an independent status. A little introspection and our own personal experience of what others do, will be Such secondary fictitious sufficient to confirm this. concepts the human brain delights to create. But on the ground that they are secondary they cannot be rejected, for they are really ready-reckoners of the mind wielding a paramount influence on human conduct. They occupy in the mental process the same position as may be assigned to reflex action in the nervous system. No individual person goes to the market and bids for goods with a mental vacuum. Every one of any experience has

already in him an independent marginal utility of money which he brings to bear on his choice of offers. This much is admitted by the new theorists, for in the relative scale with which they work, money figures along with commodities, sometimes have a higher rank and other times having a lower. This will not be possible unless money is conceived to have for every individual a utility of its own. So then the assumption that every individual has a definite marginal utility of money made earlier in the analysis is now seen to be quite warranted.

We may then conclude that Marshall's method of measuring utility is for all practical purposes quite legitimate, and there is no need to consider that thereby his doctrine has become tainted. This does not mean that the law of demand cannot be formulated without the aid of the utility concept. All that it means is that among the alternative modes of exposition the Marshallian system is equally valid with any other. However, one may be permitted to express the doubt whether a law of demand which starts from a scale of preference will ever attain that finality which in Marshall's theory constitutes its greatest attraction.



சிவமயம்.

செட்டி நாட்டு டாக்டர். ராஜா. சர். அண்ணும% செட்டியாரவர்கள் ஷேஷ்டியப்த பூர்த்தி வாழ்த்து.

அறுசீர்க் கழிநெடிலடி யாசிரிய விருத்தம்.

திருக்கயிலாய பரம்பரைத் திருவாவடுதுறை யாதீனத்து ஸ்ரீ: ஸ்ரீ மகா சந்நிதானம் அவர்கள் உத்தரவுப்படி ஒடுக்கம். இராமலிங்கத் தம்பிரான்.

பூராடு மலர்க்கமலப் பண்ணேவன்றன் படைப்பெனுமிப் புவனி மீது வாஞடு மமார்கணர் தாஞடும் பெற்றிமையின் வளங்கண் மேவித் தேஞடு மலர்க்கொன்றைச் சிவபெருமான் றிருவருளின் றிறமென் ரூதக் காஞடு காத்தானென் ருருபதிபாண் டியஞட்டிற்கவினு மாதோ.

அணேயதிரு நகரதன்கண் வாழ்க்கைபேறுஞ் சிறப்புடையா ரான்பொற் பாதங் கனவுஙிலே யுறுபொழுது மறவாத பெருஞ்செல்வர் கருத்தி லென்றுக் திணேயளவு மறுவில்லார் திருநேறங் கண்டிகையுஞ் சிவணு மெய்யர் தனவணிக செனவுலக முரைக்குமொரு மரபின்வரு சால்பு மிக்கோர்.

2

அப்பெரிய மாபின்கட் டோன்றியதா லொருகுடும்ப மஃதியா தென்னின் மெய்ப்பரிவு சிவன்கழற்கே விளேத்தவுணர் வொடுக்தோன்றி மேம்பட் டென்றஞ் செப்பரிய சிவதருமங் கொள்ளேகொளப் பிறக்ததெனுஞ் சிறப்பின் மேவு மொப்பரிய வீயசென வுரைபெறுமோர் குடும்பமிவ ணுரைக்குங் காலே.

3

அக்காளி லிணயகுடும் பத்தினர்செய் சிவதரும் மளப்பின் நன்றி முன்ளைிற் புலிமுனியும் பதஞ்சலியுக் தொழுதேத்த முக்க ணெக்தை சென்ளும் மலர்க்கூர் சிவகாமி கண்களிப்பச் செய்யு மாடுற் போன்ளும் மம்பலஞ்சூழ் திருத்தளியைச் செம்பியர்போற் புதுக்கி ஞரால்.

4

உண்டி முதற் றேயுணவின் பிண்டமென வுரைத்திடுமிவ் வுலக மற்று முண்டிகொடுத் தோருயிரைக் கொடுத்தவரே யெனவுரைக்கு முறுதி நோக்கி யுண்டிவறி ஞருக்குதவித் தில்ஃயில்வா முக்தணரா முறுவர்க் கெல்லா முண்டியிரு பொழுதுமவர் பெறவமைத்தா செனினி தனி னுயர்க்த துண்டோ.

5

இவ்வண்ணம் பேரறங்கள் பலவொரு நூற் ருண்டாக் வியற்று மந்தச் செவ்வண்ணத் திருமாபி விராமசா மிப்பெயர்கொள் செல்வன் ரேன்றி மைவண்ணத் திருமிடற்றெம் பெருமான்வாழ் புலியூரின் வாழ்க்கை மேவி யுய்வண்ண நன்னீரு முயர்தரப்பள் ளியுகிறுவி யுயர்வு பெற்றுன்.

6

உத்தமனு மவனிளவல் செட்டிகாட் டாசனென வுலக மோது மெய்த்தகுசீர் திகழ்தருமண் ணுமஃபென் பானிக்த விரிநீர் ஞாலத் தெத்திறமுக் திகைகரைக் கலேககராச் செய்வமென வெண்ணி யாங்கு முத்திறங்கொள் கலாசாலே நிறுவிப்பல் கூலக்கழக முற்று வித்தான்.

7

அங்கயற்க ணம்மை திருப் பெயரான கலாசாலே யவைமூன் றேங்கு மங்கயற்கட் கலாசாலே யாங்கிலமே பயிற்றுவிக்கு மஃதொன் றேணே யங்கயற்கட் செக்தமிழ்நூற் கலாசாலே தமிழ்பற்று மன்றி மற்றென் நங்கயற்கட் போதீணசெய் கலாசாலே யாகுமிவ ணறையின் மாதோ.

8

Carp

அண்ணு மீலப்பல் கழகமெனு

மதனே டிசையின் கலாசாலே
கண்ணு வியைத்துத் தமிழகத்திற்
கவின்கொ ளிசையின் கனியமுத முண்ணு தாரு முண்கவென ஆட்டி வளர்க்கு மிவன்பெருமை யெண்ணு கின்றே சேடனுமு னேகி யொளித்தான் பாதலமே.

9

வேத முதலே முதலாக விரிந்த பலசாத் திரத்தொகுதி காத லாக பெங்கள்பிரான் காழி நாதன் முதலானு சோது முறைக ளோசேமு முவன்றன் கல்விக் கொடைபெறுவா னீதி முறையின் வக்தவெனி னிகழ்த்த நிற்ப தினியென்னே. 10 இன்ன வாறிங் கறம்பலவு மியற்ற மண்ணு மஃயேண்ண றன்ன தறுபா ஞண்டுகிறைக் தானெம் பரமா சாரியனு நண்ணர் நமச்சி வாயகுரு ந**லமா எருளா லாண்டுகளும்** பொன்னி மணவிற் பலவாகப்

11

புகழோ டினிது வாழியவே.

தாய் மொழியும் விக்ஞானமும்

(நா. அனந்தவைத்தியநாதன் எம். எ. அண்ணுமஃ யுனிவேர்சிடி)

'' எதுவுக் தமிழில், எல்லாக் தமிழில், எங்குக் தமிழில்'' என்ற கோஷம் நமது நாட்டில் இங்கும் அங்கும் எங்கும் முழங்குகிறது. இது தமிழ் மக்களின் உற்சாகமான ஆர்வத்தைக் குறிக்கும் அறிகுறி. நாம் இன்று விக்ஞான காலத்தில் வசித்து வருகிறேம் என்பது மிகை இவ்விக்ஞானத்தின் மர்மங்களே அறியவேண்டு மென்னும் பொதுமக்களின் தாக*த்தைத்* தீர்க்க வேண்டியது அவசியமே. ஆ*ஞ*ல், இக்கலேயோ மேல் நாடுகளிலே ஆழ்க்து வேரூன்றி, அக்தக்த நாட்டு அரசாங்கத்தாரின் உதவியாகிய உரத்தில் கொப்புங் கினேகளுமாய்க் கொழுத்து ஒங்கெ வளர்ந்து, மக்களின் செல்வமும், நாடுகளின் வளப் பமும், கற்றேரின் நுண்ணறிவும், இீளஞரின் ஆராய்ச்சி முயற்சியும் பொங்கித் ததும்பும்படியாகப் பூக்கஃாயும் காய்கஃாயும் சொரிர்து கொண் டிருக்கிறது. பிறநாடுகள் ஒவ்வொன்றிலும் அவ்வர் நாட்டுத் தாய் மொழியில் வெளியாகும் நூல்களும் பத்திரிகைகளும் மேற் கூறிய தற்கு அத்தாகூடிகளாகும். ஏன், நம் நாட்டிலும் **அதை**ப் பயிர் செய்**து** பயன் பெறலாகாது? இவ்வுயர்வான எண்ணம் நம்மிற் பலரின் உள் ளத்தில் பதிர்து கிளர்ச்சி செய்து கொண்டு வருகிறது. இவ்**வி**த *நூ*ல் களும் பத்திரிகைகளும் தமிழில் இல்ஃயே என்று பரிதவிப்போர் பலர். இதைக் குறிக்கவே ஸ்ரீ சுப்பிரமணிய பாரதியார் 'தமிழ்த் தாய்' என்ற பாட்டில் கூறுகிறுர்:

> இன்றெரு சொல்லிணேக் கேட்டேன் !— இனி ஏது செய்வேன் ! எனதாருபிர் மக்காள் ! கொன்றிடல் போலொரு வார்த்தை— இங்கு கூறத் தகாதவன் கூறினன் கண்டீர். ''புத்தம் புதிய க&லகள்—பஞ்ச பூதச் செயல்களின் நுட்பங்கள் கூறும்

மெத்த வளருது மேற்கே—அந்த மேன்மைக் கலேகள் தமிழினில் இல்லே. சொல்லவுங் கூடுவ தில்லே—அவை சொல்லுந் திறமை தமிழ் மொழிக் கில்லே மெல்லத் தமிழினிச் சாகும்—அந்த மேற்கு மொழிகள் புவிமிசை ஓங்கும்" என்றந்தப் பேதை உரைத்தான்—ஆ இவ்வசையெனக் கெய்திட லாமோ. சென்றிடுவீர் எட்டுத் திக்கும்—கலேச் செல்வங்கள் யாவும் கொணர்ந்திங்கு சேர்ப்பீர்.

மேற்கூறியபடி தகாத வசை மொழிகளேத் தொடுக்கிருர் கில பேதை யர். வெளியிற் சொல்லாவிடினும் 'தமிழில் முடியுமா' என்று சந்தே கிக்கும் அறிவிற் சிறந்தோரிற் சிலரும் உளர். கம்பர், வள்ளுவர், இளங்கோ முதலிய கிகரிலாப் புலவர்கள் பிறந்த இந்நாட்டில், பலவித சாத்திர மணம் விசும் இத்தமிழ் நாட்டில் பிறந்த எங்களது பெருமையை என்னென்றுரைப்பது என்று பழங்கதைகள் சொல்வதில் மகிமை இல்லே. பிறநாட்டார் நம்மை வணங்கும் படியாக 'பிறநாட்டு நல்லறிஞர் சாஸ் திரங்களேத் தமிழ் மொழியில் பெயர்த்தல் வேண்டும்; இறவாத புகமுடைய புது நூல்களேயும் தமிழ் மொழியில் இயற்றல் வேண்டும்.' என்ற பாரதியாரின் எண்ணம் ஏன் இன்னும் பூர்த்தியாக வில்லே?

நமது அறிவு வளா வளா அதைத் தெளிவாகப் பிறருக் குப் புகட்டுவதற்கு நமது பாஷையும் ஒத்து வளாவேண்டும். இவை முன்னும் பின்னுமாக வளர்ந்தால், தகராறுதான்; இடையூறு கள் பல ஏற்படும். புதிதாகப் பல சொற்களே ஆக்கும் அவசியம் ஏற் படும். நமது வாழ்க்கையிலும் நாகரீகத்திலும் விக்ஞானம் பலவாருக ஈடுபட்டு ஊசலாடுகிறது. விக்ஞானக் கினே ஒவ்வொன்றிற்கும் அதற் குரிய பரிபாஷை இருத்தல் அவசியம். மற்ற நாடுகளில் இப் பரிபாஷை கள் உள. நம் நாட்டிலும் பரிபாஷையைச் சிருஷ்டிக்கவேண்டும். அதை எங்ஙணமாக்குவது என்பது விவகாரம்.

' நாமகரணம்' அல்லது 'பெயரிடுதல்' என்பதில் மக்களுக்குள் அபிப்பிராய பேதம் இருப்பது இயல்பே. ஒருதாரணத்தை எடுத் துக்கொள்வோம். ஒரருமைக் குழந்தை பிறந்துவிட்டால், அதற்கு என்ன பெயர் கொடுப்பது என்பதைப்பற்றி நடக்கும் விவாதத்தின் போக்கு நன்கு தெரிந்ததே, தன் பெயரை வைக்கவேண்டுமென்று சம்பர்திகளுக்குள் மணஸ்தாபம்; அப்பாவுடன் சண்டை; அம்மா வுடன் விவகாரம்; மாமிமாமனுடன் மனக்கசப்பு; புருஷன் பெண் டாட்டிக்குள் சச்சாவு; உற்றுருறவினருடன் காட்டமான சர்ச்சை: புராணப் புராதனப் பெயர்களேச் சிர்தூக்கிப் பார்த்தல், டாக்கெளில் நடிக்கும் நக்ஷத்திரங்களின் *நூ*தன நாமங்களேக் கடைதல், இதுவ**சை** இடாத இனிய இசையுடைய சிறு பெயர்களுக்கு அஃதல்—அப்பப்பா! போதும் போதும். விக்ஞான வார்த்தைகளே ஆக்குவதிலும் திவிர அபிப்பிராய பேதங்களும் கொடுஞ் சண்டை சச்சரவுகளும் கூத்தாடு கின்றன. இதைக்கண்டு பயர்து பலர் தமது முயற்சிகளே நிறுத்திவிடு கின்றனர். சண்டை ஓயட்டும் பின்பு தமிழில் எழுதலாம் என்பார். சமுத்திர அலே ஒய்க்து கீராட எண்ணுவதுபோலுள்ளது இது. கீக்தத் தெரிர்த பிறகே தண்ணீரில் இறங்குவேன் என்பதுபோல், மொழி பெயர்ப்புத் தயாரானவுடன் விக்ஞான நூல்களேத் தமிழில் எழுதிவிடு கேறேன் என்று சொல்வாருமுண்டு.

கலேச் சொற்களே ஆக்குவதில் முக்கியமாக நான்கு கக்ஷிகள்.

(1) '' தாய தமிழ் மொழிகளேயே கையாளவேண்டும்; பிற மொழிகளினின்று கடன் வாங்கக்கூடாது; அங்ஙணஞ் செய்தால், தமிழ் உருமாறி விடலாம்; பிற மொழிகளேக் கற்ப தில் தமிழ் நாட்டு மாணவர் துன்புறுவார்; பிறமொழியை வழங்க, தமிழ்மொழி சிறப்பிழக்து உயி ரற்றதாகாதா? பிற மொழியைக் கையாள, தமிழிலில்லாத பல எழுத்திலா ஓசை இருக்கின்றனவே. ஆரியக் கடன் சொற்களேக் குறிக்க, ஸ, ஷ, ஜ, ஹ, ஸ்ரீ முதலிய பல எழுத்துக்களே ஏற்று, தமிழின் கீண்ட கெடுங் கணக்கை கீட்டிக்கொண்டே போகின்றனர். இது போதாதென்று மேல்நாட்டு அரிச்சுவடியிலுள்ள b, d, f போன்ற எழுத்துக்களின் ஓசையைக் குறிக்கத் தமிழ் புதிய எழுத்துக்களேக் கற் பண செய்யவேண்டு மென்கிறுர்கள். இவை தமிழ் இலக்கணத் திற்கும் இசைக்கும் இசகுபிசகான இடங்கேடல்லவா? தமிழோ, ஒரு பொருள் பல சொற்களில் சிறப்பாக வளம் பெற்றிருக்க, அதையே கொள்ள வேண்டாமா? யாது நேரி னூட், தமிழின் கற்பைக்காப்பதே தமிழரின் கடமை'' இது ஒரு கக்ஷி.

- (2) 'ஸம்ஸ்கிரு த பாஷையின் விசேஷ லக்ஷணம் ஸமாஸம். சக் தேகமில்லாமல் அர்த்த புஷ்டியுடன் நூதன வார்த்தைகளேச் சாளமாய் சிருஷ்டிக்க ஸம்ஸ்கிருத பாஷையே தாமானது. லக்ஷணமான தாதுக் களே பெடுத்து விசேஷ ராமங்களேச் செய்வது சுலபம். மேலும், ஆகி காவியங்களிலும் ஆயுர்வேதாதி சாஸ்திரங்களிலும் ஸம்ஹிதைகளிலும் விக்ஞான பதங்கள் அபரிமிதமாகக் காணப்படும்' என்பார் வடமொழி அபிமானிகள்.
- (3) இது என்ன அகியாயம், டெக்னிகல் டெர்ம்ஸ்களுக்கு மொழி பெயர்த்தலா? ஸயன்ஸ் வளர்க்து பெருகி வருகிறது. அது இன்டர்காஷனலானது. முன்னேறி வரும் உலகத்துடன் நாமும் முன்னேற வேண்டாமா? ஸயன்ஸ் டெர்ம்ஸை அப்படி அப்படியே ட்ரான்ஸ்லிடரேட் செய்வது தான் அட்வாண்டேஜ். அது தான் கரெக்ட் ஆட்டிட்யூட். மேலும் சண்டை சச்சாவில் காலத்தையும் புத்தியையும் சக்தியையும் ஏன் வீணுக்கவேண்டும்" என்று கூறுவார் சில ஆங்கிலப் பிரியர்கள்.
- (4) 'ஸயன்ஸ் டெர்ம்ஸ் என்கெருர்களே அவற்றிற்கு எந்தெந்தத் தமிழ்ச்சொற்கள் மிகப்பொருத்தமாக வழக்கத்தில் இருக்கின்றனவோ அவற்றை உபயோகிப்பதே உசிதம். இன்னும் பொருளேத்தெளிவு படுத்தும் பொருட்டுப் பழக்கத்திலுள்ள வடமொழி வார்த்தைகளே வேண்டிய சந்தர்ப்பத்தில் உபயோகிப்பது நலம். எங்கெங்கு மொழி பெயர்க்க முடியவில்ஃயோ அங்கங்கு ஆங்கிலப்பதங்களேக் கொள்வதே சௌகரியம்' என்பார் சமாஸக்கக்ஷியினர்.

சந்தர்ப்பத்திற் கேற்றவாறு இதையும் அதையுமோ, அதையும் இதையுமோ சேர்த்துக் கொள்ளலாம் என்று சொல்லும் அல்லது நிணேக்கும் வேறுகக்ஷிகளுமுள. என்ன கதம்பம்! என்ன சிக்கலான குழப்பம். இதைவிட்டு மீளுவதற்கு வழியுண்டா?

பெயரிடுவதில் கம்காட்டில் மட்டுக்தான் அபிப்பிராயபேதம் என் றெண்ண வேண்டாம்; மேல்காடுகளிலும் இவ்விதக் குழப்பமும் அபிப் பிராயபேதமும் தாண்டவமாடி கின்றன.பதின்மூன்மும் நூற்முண்டிற்கு முன், அங்கு ஒழுங்கான பரிபாஷை கிடையாது; மனோஜ்யப் பெயர் களே கடமாடின. 19-ம் நூற்முண்டிற்கூட, ஒரு பொருளுக்குப் பன்னி ரண்டு பெயர்கள் இருக்தனவாம். லவாசியர், பெர்ஸீலியஸ் போன்ற பல விக்ஞான நுண்ணறிவாளர்களின் அபிப்பிராயங்களே விக்ஞான உலகம் ஏற்றுக்கொண்டதன் பயஞகவே, இப்பொழுது அங்கு ஒழுங் கேற்பட்டுவிட்டது. இந்நாளிலும் அவ்வப்போது பெயரிடுவதில் சில சச்சரவுகள் ஏற்பட்டு வருகின்றன.

விக்ஞான வார்த்தைகளே ஆக்குவதற்குத் தகுர்தமுறைதான் யாது என்பதைச் செறிது ஆராய்வோம். கியாயஸ்தலங்களில், வக்கீல்கள் வாதாடும்பொழுது, சட்டப் புஸ்தகங்களிலிருந்து 'அதாரிட்டிகளே' எடுத்துக்காட்டுவது வழக்கம். அதுபோல, எடுத்துக்கொண்ட விவ காரத்திற்கும் ஓர் அபூர்வமான 'அதாரிட்டி' காட்டுகிறேன். மெல்லார் விக்ஞான உலகில் ஒரு பெரிய 'அதாரிட்டி'. அக்கிறமை வாய்ர்க போசிரியர் ஒரிடத்தில் 1 எழுதியுள்ள கருத்தை இங்கு குறிப்போம். '' விக்ஞான சம்பர்தமான செறப்புச்சொல் தெளிவாயிருக்கவேண்டும் ; சக்தேகம் குழப்பம் யாதும் ஏற்படாதபடி கேர்மையாய் ஒன்றைக் குறிக்கவேண்டும். இதனே இரண்டுவிதங்களில் செய்யலாகும் (1)பாஷை யிலுள்ள வார்த்தைக் குறைவால் நாடோடியாய் வழங்கும் சில சொற் களுக்குப் புதிய அர் தஸ்தைக்கொடுத்து, சிறப்பிலக்கணங்கூறி, குறிப் பாக ஒன்றையே குறிக்கும்படி செய்யலாகும் (உ-ம் atom, energy, force, power). (2) புதிதாக வார்த்தைகளேக் கற்பித்தல் (உ-ம் electron, telegraph). புதுப்பெயர்கள் முதலில் வியப்பாயும் அன்னிய மாயும் கர்ணக்டோமாயும் இருக்தும் காள**டைவில் அவை** செவிக்குப் பழக்கமாகவிடும்; விரசமாயிரா; பிரயாசையின்றி அவற்றை எளிதாய் வழங்கமுடியும். (இது நமது அநுபவம்.) பொருள், முறை, செயல் இவற்றின் போக்கை நாம் அறியக்கூடாமலிருப்பின். அவற்றைக்குறிக்க, ஏதோ அர்த்தமில்லாத பெயர்களேக் கொடுப்பது நலம். அப்பெயர், தப்பானதும் பொருத்தமில்லாததுமான சொல்‰ விட உயர்வானது..... க்ரீக் அல்லது லாடின் பாணையிலுள்ள தாதுக்களேக்கொண்டு புதிய சொற்களே ஆக்குவதே உத்தமம்.....இதில் அரேக சௌகர்ய முண்டு". இம்முறையையே மேல்நாடனே த்தும் பின்பற்றி வருகின்றன.

நாமும் மேற்கண்ட முறையை மேற்கொள்ளுகலே முறை. சர்தேக மேற்படாவிடின் வழக்கத்திலிருந்து வரும் தமிழ்ச் சொற்க‰

^{1.} A comprehensive Treatise on Inorganic and Theoretical chemistry J. W. Mellor—Vol I pp. 114

யும் வடமொழிச் சொற்களேயும் உபயோகிப்பதில் யாதொரு தடையும் கிடையாது. Air என்பதை 'வளி' என்பதைவிட 'காற்று' என்றே குறிப்பிடலாம். இலக்கணங்கள் என்பதைவிட ' குணங்கள் ' என்ற Properties என்பதைக் குறிப்பதில் சௌகரியமுண்டு. Solar System என்பதை ஞாயிற்றுத் தொகுதி என்கிருர் சிலர்; சூரிய மண்டலம் என்றுல் எளிதில் பொருள்படுகிறது. Atom, molecule என்பவற்றை முறையே பாமாணு, அணு என்ற மொழி பெயர்ப்ப தற்கு ஈடதை பழைய சாஸ் தொங்கள் ஆதார மளிக்கின்றன. இவ்வகை வேஃயில் நாம் விசால மனதுடையவர்களாயும், ஜாதிமத துவேஷம் இல்லா தவர்களாயும், உயர் தா விக்ஞானம் நம்நாட்டில் செழித் தோங்கி மக்களுக்குப் பல துறையில் பலனளிக்க வேண்டும் என்ற நோக்க முடையவர்களாயும் இருத்தல் மிக அவசியம். தமிழ் மொழி வளர வேண்டும், த‰ தூக்கி நிற்கவேண்டும், எங்கும் புகழ்பெற வேண்டும், பூரண உபிருடன் தாள்ளாடிக் குதித்து உலாவவேண்டும் என்ற எண் ணமுடைய தமிழபிமானி சண்டை சச்சரவில் ஈடுபடமாட்டான். ஏனெனில் ' ஒன்று பட்டா அண்டுவாழ்வே; நம்மில் ஒற்றுமை நீங்கில் அணேவர்க்குர் தாழ்வே.' விக்ஞானம் உண்மையையே நாடி நிற்பது. அவ்வுண்மையைக்கண்டு பிறருக்குப் போதிப்பதே விக்ஞானியின் கோக் கம். ஆனதால் அவர் ஒரே லக்ஷியமுள்ளவராயிருத்தல் வேண்டும். கான் பிடித்த முயலுக்கு மூன்றே கால் என்று சாதிக்கலாகா*து*; அவலே வளாவேண்டுமானுல், பிறபானை,களினின்று சில சொற்கோக் கடன் வாங்க வேண்டித்தான் வரும். ஆங்கில பாஷை இன்று உலகெங்கும் பாவி மேன்மைப் பதவி அடைந்திருப்பதன் மர்மம் இதுவே. சர்வ சம்மதமாய்ப் பிறமொழியினின்று தாராளமாக ஆங்கிலேயர் வார்த்தை களேத் தமது அகரா தியில் சேர்த்து விடுகின்றணர். Sulphur என்பது सुख्य + अरि (தாமிரத்தின் விரோதி) என்ற பதங்களிலிருந்து ஆக்கப் பட்டது. Ekaboron, dwisilicon என்பதிலுள்ள ஏக, த்வே என் பவை வடமொழி முன்னிஸ்கள். Silicon என்ற ஒரு தனிப்பொருளின் பெயர் Silica (மணல்) என்பதிலிருந்து வந்தது. அவ்வோசைக் **தெண**ங்க அதை 'கிலகம்' என்று சொல்லலாம். கிலா — கி‰ — கல் என்ப திலிருந்து உண்டாவதால் அது மிகப் பொருத்தமானதாகும். அதே விதமாக, Phosphorus (phos வெளிச்சத்தை phero வகிக் சேறேன்) என்பதை பாஸ்வாம் என்று விடலாம் (வுகு = பிரகாசித்தல்).

கில உப்புக்கள், அமிலங்கள் என்பவற்றின் குணங்களேக் காட்ட மேல் நாட்டு முறையிலுள்ள per, meta, ortho, hypo, para என்பவற்றை முறையே பா, மித, பூர்வ, உப, அபா என்றுக்கிவிடலாம். எவ் வெப் பெயர்கள், ஒர் விக்ஞானியையோ, தேசத்தையோ, ஊரையோ, புராண தேவதையையோ முன்னிட்டுக் கொடுக்கப்பட்டணவோ அவற்றை அப்பெயர் கொண்டழைப்பதே தர்மம். உ-ம். வோல்ட், ஆம்பெயர், ஒம் (Ohm), பாரடே, ஹென்ரீ, காலியம், ஐரோபியம், ஸ்ட்ரான்ஷியம், மாக்னீஸியம், வனேடியம், தோரியம் முதலியன.

தமிழ் மக்களாகிய நாம் இந்தியர்களுமாவோம். இந்திய தேசம் முழுவதற்கும் பொதுவாயிருக்கும்படி விக்ஞான வார்த்தைகளே அமைப் பதே தருமம், நலம், சௌகரியம். வடமொழியை ஆதாரமாகக் கொண்டு விசேஷ விக்ஞான வார்த்தைகளே அமைப்பின், அவை, நமது ஆர்திர, கன்னட, மஃவயாள, வங்க, மராட்டிய சகோதரி சகோதரர் களுக்கும் பொதுவாய் நிற்கும். எல்லோரும் ஒத்துழைத்து நலம் பெற லாகும். புதிதாய் ஆக்கிய அகேக சொற்கள் நம்மிற் பலரைப் பயர் தோடச் செய்யும். ஆங்கில விக்ஞான வார்த்தைகளும் சின்னங்களும் நம் மாணவர்களேப் பயர்தோடச் செய்யவில்ஃவா? பயங்கொள்ளலா காது. மனவுறுதியுடன் திடங்கொண்டு போராடுவதே பெருமை. ஒத்துழைத்து ஒரு மனப்பட்டு ஒரு முடிவுக்குப் பலர் வந்துவிட்டால் இருள் நீங்கிச் சுகம் பெறுவோம் என்பது திண்ணம்.

இக்கலேச் சொற்களே ஆக்குவதில் முயற்கி எடுத்துக்கொள்ளும் கழகங்கள் பல உள. ஆணல், கோக்கம் ஒன்றுபினும், அவற்றுள் பல துறைகள் காணப்படுவது வருந்தத்தக்கது. இது பொருட்டு, சென்னே அரசாங்கத்தார் கில கமிட்டிகளே அவ்வப்போது கியமித்து வருகின்றனர். 1932ல் கியமிக்கப்பட்ட கமிட்டியின் ஆலோசணேயை ஆகாரமாகக் கொண்டு பள்ளிக்கடங்களிற் போதிப்பதற்கேற்ற பல புஸ்தகங்கள் வெளியாயுள்ளன. அவை பாட புஸ்தகங்களாகவும் வைக்கப்பட்டிருக்கின்றன. கலேச் சொற்களேச் சீர்திருத்தி அமைப்ப தற்கு இப்பொழுது ஒரு கமிட்டி கியமிக்கப்பட்டு வேலேசெய்து கொண்டும் வருகிறது. ஆங்கிலத்திலும், தாய்மொழியிலும், உரிய கலேயிலும், வடமொழியிலும் அப்பியாசமும் தேர்ச்சியுமுடையவர்களே கலேச்சொற்களேச் சரிவர ஆக்கத் தகுதியானவர்கள். ஒவ்வோர் வார்த்தையின் முழு சரித்திரத்தை அறிக்தால்தான் அதற்குச் சரியான வார்த்தையின் முழு சரித்திரத்தை அறிக்தால்தான் அதற்குச் சரியான வார்த்தையின் முழு சரித்திரத்தை அறிக்தால்தான் அதற்குச் சரியான வார்த்தையின் முழு சரித்திரத்தை அறிக்தால்தான் அதற்குச் சரியான

மொழி பெயர்ப்பை ஆக்க இயலும். பல துறையில் பிரசித்திபெற்ற பண்டி தர்களேக் கூட்டித் தீர ஆலோசித்துப் பரிசீலண செய்து ஒரு முடிவிற்கு வர்தால், அத்தீர்மானங்களே நாடு மனப்பூர்வமாக ஏற்கும். ஏற்கும்படி வற்புறுத்தவேண்டி கேரிடில், அங்ஙனஞ் செய்யவும் வேண்டும்.

கிக்ஞான நூல்களேத் தாய்மொழியில் இயற்றுவதில் பேசார்வம் காட்டும் கல்விக் கழகங்களில் அண்ணும‰ யுனிவேர்சிடி த‰ சிறந்து கிற்கிறது. இச்சர்வகலாசாலே செய்துவரும் இப்பேருதவியைத் தமிழ் நாடு ஒருபோ*து*ம் மறவா*து* போற்றிவரும் என்பது திண்ணம். காலேஜ் வகுப்புகளுக்குத் தகுந்த விக்ஞான நூல்களேத் தமிழில் நன்றுய் எழு துபவர்களுக்கு ஆயிரம் ரூபாய் பரிசு வழங்கப்படுமென்று அண்ணு மலே யுனிவேர்சிடியார் அவ்வப்போது செய்த விளம்பரங்களின் பயனுக, பல ஆசெரியர்கள் வெகுசெரமப்பட்டுப் புஸ்தகங்களே எழுதி அனுப்பு யுள்ளார். தகுந்தபடி பரிசிலின செய்து, நவின தர்க்கம், நவின ாஸாயனம், பௌதிக சாஸ்திரம் என்ற நூல்களுக்குப் பரிசுகளும் அளித்திருக்கின்றனர். இவற்றில் இரண்டு பரிசுகள் யுனிவேர்சிடியி இவள்ள இரண்டு ஆசிரியர்களுக்கு வழங்கப்பட்டன என்பது குறிக்கத் தகுர்தது. இன்னும் ஸங்தேம், சரித்திரம், பொருளாதாரம், பிராணி சாஸ் திரம், தாவர சாஸ் திரம் முதலிய க‰களேப்பற்றிய நூல்கள் தயாசாகியும் தயாசாகிக் கொண்டும் வருகின்றன. இவை யாவும் யுனிவேர்கிடி ஆகிரியர்களாலேயே எழுதப்படுபவை என்பது யுனிவேர் கிடியின் கோக்கத்தையு**ம் அ**ங்குள்ளோரின் திறமையையும் ஊக்கத்தை யும் காட்டுகின்றன. இப்பெரும்புகழ் யுனிவேர்சிடியைச் சார்ந்ததாகும். இவ்வுயர்தாக் கல்விக் களஞ்சியத்தை ஸ்தாபித்தவர் ராஜா ஸர் அண்ணு மணே செட்டியாரவர்கள். ஆகையால் இம்மாபெருங்கீர்த்தி அவரையே சார்ந்ததாகும். அவர் நீடுமி வாழ்க! அவர் மணேவி மக்கள் நீடுழி வாழ்க ! அவர் தொடுத்த நற்காரியங்கள் யாவும் மேன்மேலும் விருத்தி அடைக! அவர் தொடுக்கும் எல்லா நற்செயல்களும் இடையூறின்றி இனிதாக முடிக ! எங்கும் மங்களம் பொங்கித் தங்குக !

தமிழ் செய்த தவம்: நமது த2லமுறையில்

கு. அருணுசலக் கவுண்டர், திருநெல்வேலி.

1928-ம் ஆண்டு: அப்போது நான் கிதம்பாம் ஸ்ரீ மீனட்கி தமிழ்க் கல்லூரியில் பயின்றுகொண்டிருந்தேன். டாக்டர் உ. வே. சாமிநாதையாவர்கள் எங்கள் தலேமை ஆகிரியர். நமது அண்ணுமலே யண்ணல் தில்லேயிலும் திருவேட்களத்தம் தாம் உருவாக்கிய பல்வேறு கல்வி கிலேயங்களே - மதிமுட்டும் மாடங்களே - மாணவர் விடுதிகளே, மேலும் இருபது லக்ஷம் காணிக்கையுடன் அளித்து, பல்கலேக்கழகம் ஒன்று காண விழைகின்றுர் என்ற செய்தி விண்ணும் மண்ணும் போர்த்தது. உலகினர் வியந்தனர். முரசு முழங்கினல் அது எவ்வளவு பெரிய வீரமுரசாயினும் அதன் ஒசை பரவுவது ஒரு காத அளவே. மழைமுகில் வான் அதிர இடித்து முழங்கினும், அதன் எதிரொலி ஒடுவது ஒரு யோசண தொலேயே. ஆனுல் நமது வள்ளல் வழங்கினர் வாரி வாரி-லக்ஷக்கணக்கில் என்ற சேதி, அன்று 'அடுக்கிய மூவுலகுமே கேட்டது'. ஈதல் - அதனைரம் இசையுடன் வாழ்தல் - இது அன்றி உயிர்க்கு வேறு ஊதியம் ஏது?

இரகசிகளை பிரபு ஒருவரின் பெருங்கொடையைச் சிறப்பித்துப் பேசுகின்முள் ஒளவை. நூற்றில் ஒருவரே அறிஞர் பேசும் சபை களில் சொல்லு தற்கு உரியர் என்பானேன்? அங்கே செல்லு தற்கும் உரியர். அவருள்ளும் புலமைப் பெருக்கால் பொருள்களே உய்த்துணர் வோர் ஆயிரத்தொருவரே. வார்த்தையின் நயக்தெரி கவிஞர்களோ பதினுயிரத்தொருவர் என்முல், சொல் நலமும் பொருள் நலமும் சுவை கண்டு துய்ப்போர் - அம்மதுரத் தமிழுக்கு அள்ளி வழங்குவோர் கோடிக்கொருவரே.

> ஆர்த்தசபை நாற்ளெருவர்; ஆயிரத்தொன் ரும்புலவர்; வார்த்தை பதிை யிரத்தொருவர்;—பூத்தமலர்த் தண்டா மரைத் திருவே ! நாநாகோ டிக்கொகுவர் உண்டாயின் உண்டென் றறு.

ஆணல், இரு நூறு அலக்ஷம் தமிழர்க்கு இன்றிருக்கும் தாதா - தரும தேவதை நம் அண்ணுமலேயண்ணல் ஒருவரே. தமிழுக்குத் தலேயே தந்திடுங் குமணவள்ளல்கள், உயிரே உதஙிடும் நந்தியம் பெருமான்கள் உலக சரித்திரத்தின் அதிசய புருஷர்களே.

பொருட் செல்வத்துடன் செவிச் செல்வமும் ஒருங்கே படைத்த பிரபு சிகாமணி கம் அண்ணல். அறிவு நூல் ஆர்வக் கஃகளே உணவாக அருக்தி வளர்க்தத அவர்களது அன்பு உள்ளம். முன்னேப் பழம் பெருமையில் முகிழ்த்து அலர்க்த கவிப்பூக்துணர், அவர்கள் வாழ்க்கை பைச் சூழ்க்து மணம் வீசியது. காவிரிப்பூம்பட்டினக் கலங்கரை விளக்கம், சீனம் வரைப் பரவிய சோழர் ஏகாதிபத்தியம், கம்பனுடைய கோசலம் - இவை கமது அண்ணல் காணும் இன் கனவுகள். இவர்கள் செய்த புண்ணியத் திருப்பணியால் அன்னம் பாலிக்கும் தில்ஃப் பொன்னம்பலம், ஞானப்பூக் கோயிலாக மாறியது. ஆனக்தக் கூத்த னுடன் அங்கே சிக்தாதேவி செழுகடம் புரிகின்றுள். ஆதரவின்றி அகம்சாம்பி காணத்தால் தஃகைவிழ்க்து நின்ற தமிழரசி, இன்று தரணி

2

நாட்டுக்கோட்டை — நகரத்தார் என்றுலே நமது கண்முன் தோன்றுவன: உயரிய தங்கள் இலட்சியங்களேப் போலவே, தமிழ் நாடெங்கும் அவர்கள் எடுத்த கோயில்கள்; தங்கள் மனம் போலத் தெளிந்த பொய்கைகள்; பூஞ்சோலேகளுமே. கோயில்களே நமது சமயச் சிறப்பு; சிற்பச் செல்வம்; ஆடாங்கு. 'மக்கள் தங்கம் உயர்ந்து வளர்கெனக் கோயில்கள் சூழ்ந்ததும் இந்நாடே' சோழ பாண்டிய விஜயநகர வேந்தர்களுக்குப் பிறகு, தமிழர் சமய வாழ்வைப் பொன்னே போலப் போற்றிய பெருமை நகரத்தாருக்கே உரியது. ஆணல், பொன் வேய்ந்தும்முலாம் பூசியும் செய்விளக்கெடுத்து, நிபந்தங் கள் விட்டு, திருக்கோயில்களே ஒளிபெறச் செய்ததுபோல, இவர்கள் அன்று தமிழ் மக்களது உள்ளத்தையும் அறிவொளி வீசும் பொற் கோயிலாக்க முயலவில்லே. சைவம் அவர்கள் கைகயில் தழைத்தது போலத், தமிழர் நற்கலேயும் நாகரிக மாட்சியும் வளரவில்லே. வேதம் ஒதுதற்கும் தேவாரம் இசைத்தற்கும் தனித்தனியே பாடசாலேகளே திறுவினர்; அன்னசத்திரங்கள் ஆயிரம் அமைத்தனர். ஆயினும் ஏன்? இதனினும் மேல் ஆங்கொரு ஏழைக்கு எழு*த் த நி*வித்தல் அல்லவா?

முன்னுளோர் எல்லாம் பின்வருவோர்க்குத் தேடிவைக்கும் பெருஞ் செல்வமே கல்வி; அது வெள்ளத்தே போகாது; வெந்தண லில் வேகாது ; கொடுக்க**வு**ர்தான் நிறையுமே அன்றிக் குறைவு*ருது*. அகத்தில் அது இன்பமடையைத் திறக்கும்; புறத்திலே புகழை கு*ற்றது‱*. கல்வியைப்ப*ற்றிய* இம்மூல நாட்டும்; சி*ற்று*பிர்க் உண்மைகள் எல்லா நாடுகளுக்கும் பொதுவே. எனினும் மக்களின் பண்புக்குத்தக நாடுகள் தோறும் கல்வியின் வழி வேறு பிரிகின்றது. இங்கிலார்தின் கல்வித் திட்டத்தில் விளேயாட்டுகள் கட்டாயம்; இத்தாலியிலோ கணேகளுக்குத் தணேமையிடம்; தன் மதிப்புடன் பிழைக்கக் கூலி கிடைக்கும் எவ்விதத் தொழிலும் இகழ்ச்சிக்கு உரிய தில்லே என்ற பாடம் அமெரிக்கப் பள்ளிகளில். ஆணுல் கம் நாட்டிலோ . நாம் அரசியல் நிஃயில்தான் வீழ்ந்து கெடக்கின்றேம் என்பதில்ஃ ; , நமது வாழ்க்கைக் கஃகெளிலும் இலக்கியக் கருவூலத்தும் உயர்ந்தன எல்லாமே பின்தள்ளி ஒதுக்கப்பட்டிருக்கின்றன. தமிழறிவு நம் மவர்க்கு, நாம் நிணப்பதினும் மிகக் குறைவே. ஆங்கிலத்தால் அழி வில்‰; ஆக்கமே எனினும், அதன் பண்பமைந்த கல்வியால் நம்மவர்,

> ஆங்கிலம் ஒன்றையே கற்ரூர்; அதற்கு ஆக்கையோ டாவியும் விற்ரூர்; தாங்களும் அங்கிய ராஞர்; செல்வத் தமிழின் தொடர்பற்றுப் போஞர்.

உத்தியோக கிஃயம், சட்டசபை, மாசனக்கூட்டம் எங்கே சென்று அம் அங்கே, வாய்மை வீற்றிருக்த இடத்துப் பொய்மை, அறம் தவழ்க்த இடத்து மறம், கடமைக்கு மாறுக உரிமைகளேயே காண் கின்றேம். ஒழுங்கு இல்ல; குழப்பங் குடிகொண்டது. ஆழ்க்த கிக்கீனக்கு மாறு ஹாஸ்யத் துணுக்குகளோ? கட்டுப்பாடு தொலேக் தது; கட்சிப் பிணக்கு மலிக்தது. இது மேல்புலக் கல்வியின் விளேவு. அக்கல்வியால் காம் அடைக்த கன்மையினும் தீமையே மிகுதி. காம் இழக்த மனத்தை மீண்டும் பெறவேண்டுமானல், கமக்குரிய கலேப் பெருக்கும் கவிப் பெருக்கும் காலத்துக்கேற்ற இயல்பில் கடல் வெள் எம் போல் பாய்க்து பெருகுவது எத்துணே அவசியம் என்பதைச் சொல்லவேண்டா.

வங்க நாட்டிலே அதன் எழுச்சிக்குக் கட்டியங் கூறினவர் இராம மோகன ராயர். அவர் உள்ளத்து அரும்பிப் பங்கிம் சர்திரர் எழுத் திலே தவழ்ந்து, தாகூரடிகள் கவிதையிலே வங்க மண்ணே மலர்த்திய தெய்விக இயக்கம் ஒன்று, தெலுங்கரை விழிப்புறுத்தி மராடத் திலகரின் வீரமுழக்காய் தமிழ் வானத்து அதிர்ந்தது. தமிழர் இயக்கம் உருவாகி எழுந்தது. பழந்தமிழர் பெருமையை ஆதா வாகக் கொண்ட அது, வறண்டயர்ந்த தமிழ் நிலத்துப் புத்தமுதாகப் பொங்கெயது; புது வாழ்விற்குரிய தாய்ப்பாலாகச் சமைந்தது. 'சொல்லில் உயர்வு தமிழ்ச் சொல்லே' என்ற துணிவு பிறர்தது. 'தமிழ் கூறும் நல்லுலகின்' மீது காதல் கனிந்தது. 'கும்பிட்டு வாழ்கெலோம் பாம்' என்ற தன்மான உணர்வு தலே எடுத்தது. தமிழை வளர்க்கும் சங்கங்கள் பல செங்கப் புலவர்களேச் சேர்ந்து அமைக்தன. தெருவெலாம் தமிழ் முழக்கம்; சேரியெலாம் சிர் திருத்தம். '' பாக்குத் தறித்து விளேயாடும் பாலகர்வாய் நாக்கும் தமிழ் மண**்தது. தமிழருடை**ய இம் மலர்ச்சிக்குத் திருவன**்தை** சுந்தாம் பிள்ளே நெறிகாட்டி நின்முர். நமது தேச பக்த ஆசுகளி பள்ளி எழுச்சி பாடிறார். வீர வினக்கு வி. ஒ. சி, புலவர் திரு. வி. க. போன்றவர்கள் தமிழனேத் தலேகிமிர வைத்தார்கள். தாணி எங்கும் இணேயிலா அவள் சரிதம் எழுதிச் சென்றவர் கணகசபைப் பிள்ளே என்பவர்.

அன்ற இராசாங்க ஆதாவு நம் தாய் மொழிக்கில்லே. அதனைல் தமிழடைந்த அவமதிப்பு சொல்றுர் தரமன்று. பாதிரிமார் அரசிய லார் பள்ளிகளும் கல்லூரிகளும் ஐரோப்பிய மோஸ்தரில் சமைந்தவை. அவை தமிழணங்கின் கொறுக்கூடம் ஆகவில்லே; ஆகவும் முடியாது. தாய்மொழிப் பணிசெய்வதில் சென்னேப் பல்கலேக் கழகம் அந்நாள் ஆர்வம் உடையதாக இல்லே. தங்கள் கலேவளர்ச்சிக் கென்று விசாகையில் ஆர்திரரும் தனித்தொரு சருவகலாசாலே வகுத்தனர். வெளியிடத்துக் கல்லூரிகள் பலவற்றை இணேத்து வைக்கும் பல்கலேக் கழக இயலுக்கு மாறுகக் குருகுல நீர்மையில், செழுங்கலே நியமம் ஒன்றை நிறுவினுல் எல்லாக் குறைகளும் நீங்கும். தமிழ்க் கலேவளரும் என்று நினைத்தனர். வயிற்றுப் பிழைப்பல்ல வாழ்வு; வாழ்க்கையை அழகும் இனிமையும் கலங்தொழுக வைப்பதே கருமம் என்று உளங்கொண்டனர். ஆனுல் இக்கனவு பலிக்குமா?

சிவன் எப்ப வருவார் ! பலன் எப்ப தருவார் ! பொழு தெப்ப விடியும் ! பூ எப்ப மலரும் ?

மூவேக்கரும் கொடைக்கடம் பூண்ட வேளிர் குலத்தவரும் மாண் டனரே. திருகெல்வேலிப் பாண்டியரும் சேதுபதிகளுமோ அருகினர்.

> மெல்லத் தமிழ் இனிச் சாகும் அந்த மேற்கு மொழிகள் புவிமிசை ஓங்கும்

தமிழுக்கு இந்த வசை எய்தலாகுமா ?

எங்கள் வாழ்வும் எங்கள் வளமும் மங்காத தமிழ் என்று செங்கே முழங்கு

என்ற தெய்வ கீதம் கேட்டது. கீதம் வர்த வசத்தில் எங்கள் அண்ண மலே யண்ணல்,

> இருளே நீக்கி ஒளிமினேக் காட்டினர் இறப்பை நீக்கி அமுதத்தை ஊட்டினர்.

வாழிய கம் வள்ளல்!

3

சென்ற தலேமுறையில் தமிழ்க் கல்வி குருகுல முறையைத் தழுவியது; குருட்டு மனப் பாடமே. மாணவன் ஆகிரியன் 'கக'லாக விளங்கினுன். தானுக உணரும் சக்தி - குணங் குற்றங்களே உய்த் தறியும் ஆற்றல் அவனுக்கில்லே. கோழியைத் தான் பாடலாம்; குஞ் சைப் பாடலாமோ என்ற கொள்கையில் அவன் வேரூன்றிக் கிடக் தான். முட்டையைப் பாடினுரே ஒருவர். அற்பம் அற்ப மல்ல; தனிவனத் தலரும் ஒரு கிறு மலருமே பெரிய கருத்தின் உணர்வின் எழுப்பவல்லது. கிறிது கற்ற அளவில் அவன் யமகம் கிலேடைச் கிலம்பங்களே வீ கினை. சமய நூல் பயிற்கி மொழிப் புலமையோடு கல்வி முழுதும் முடிந்ததாகவே அவன் கருதினுன். அதனைல் வறுமை அவனிடம் கீங்கா கிழல் போல கிலேப்பதாயிற்று. செந்தமிழ் பாடிச் சென்றுல்,

அண்ணுந்து கேட்பர் அழகழ கென்பர் அதன் மிறகு சுண்ணும்பு பட்ட இலேயும் கொடார்.

அவன் சொன்னுன் :

'' ஏட்டைக் கட்டி எழுத்தோடு எழுத்து வைத்து இசைத்துக் கட்டி இசைகட்டி, லோபர் மேல் பாட்டைக் கட்டி, என் தொண்டையுங் கட்டின; பாவங் கட்டின தென்றைக்குத் தீருமோ'

என்று கல்லாதவணேக் கற்றுய் என்னல் எத்துணேப் பாவம்? அவன் வாக்கில், காடெறியும் மறவன் நாடாள்வான் ஆவான்; போர் முகத்தை அறியாதவனும் புலியேறு ஆவான். இல்லது புணதலேக் கவிதையின் எல்லேயாக அவன் மதித்தான். வறுமையும் மடமையும் அடிமை யுணர்வும் மேலிட்டிருக்கும் தமிழ் நிலத்து வெறும் இலக்கியப் புலமை மட்டும் போதாது. தமிழ் மொழிக்குப் புதிய சுவை, தமிழ் உலகுக் குப் புதிய உணர்வு தமிழ் மக்களுக்குப் புதிய உயிர் தரும் கற்கண்டு மொழியில் கற்கண்டுக் கவிதைகள், வாழ்க்கையை வானில் உயர்த்தும் நால்கள் தொழில் நூல் தொகுத்தலே நமது அண்ணலார் தமது கலே நியமத்தின் கடமையாகக் கொண்டார்.

கமது பழஞ் சரிதம் நன்கு புணயப் படவில்லே; நாகரிகமும் ஆய்ர்து அறியப்படவில்லே. ரமது கலேகளே இலக்கியங்களே ரவீன முறையில் நாடினரில்ஃ. வடமொழிப் பக்தியும் பற்றும் ஒரு புறம், ஆர்வக்குறைவு மறுபுறம் இவற்றுக் கிடையிலே தமிழா ராய்ச்சி தடைப் பட்டது. எனினும், சிலர் முயற்சியால் சிறந்த பல உண்மைகள் மெள்ள மெள்ளத் தஃலகாட்டுகின்றன. காய்தல் உவத்தல் அகற்றி ஒரு பொருட்கண் ஆராயும் அருர்திறனும் பெருர்துணிவும் ரம்மவர்க் கெல்லே என்ற வீண் பழி சுமத்தப் படுகிறது. கெற்றிக் கண்ணேக் காட்டினுலும் குற்றம் குற்றமே என்ற நக்கீரர் கதை நடுகின்று பகுத் தறியும் கம்மவர் ஆற்றலேச் சுட்டி பெழுந்த பழங்கதை அல்லவா? ஆனல், சென்ற தலே முறையில் எழுந்த சங்கோத்தா விருத்திகள் சண்ட மாரு தங்கள் வைரக்குப்பாயங்கள் வீரகண்டா மணிகள் நமது ஆராய்ச்சி விளக்கை அவித்து விட்டன. மே‰ நாட்டு ஆய்வு முறையை ஒட்டி நமது இலக்கியச் சுவை கவிதைகளேத் துய்த்தல் கலேயுணர்தல் எமது அண்ணலார் அளிக்கும் பயிற்சியின் சிறக்த அமி சங்கள்.

4

மேற்குச் சிமைகளில் தன் நாடு தன் நகர் தான் என்ற குறுகிய தேசியமே கண்கண்ட தெய்வம். மானிட பலி தர்து அங்கே அதனே வழிபடுகின்றனர். ' ஒருவரை பொருவர் வதைக்கும் தேசியத்தால்— தனது நாட்டுச் சுதந்திரத்தால் பிறநாட்டைத் துன்புறுத்தல் கூடாது ' . என்பது தாகூரடிகள் கொள்கை. இதனே அவர் ஒரு கூட்டத்திலே அமெரிக்காவில் பேசியபோது அத்தேசத்தான் ஒருவன் சொன்னுன்; 'இதஞல் அல்லவா கீங்கள் அடிமைகளாக வாழ்கொண்றீர். உங்கள் வள நாடு மற்றொருவன் ஆள்கின்றுன்' என்று. அவனுக்கு அடிகள் மறு மொழி: இப்போது நாங்கள் புழுதியோடு புழுதியாக வீழ்ந்து கெடந் தாலும் எங்கள் பூமி புண்ணிய பூமி; உங்கள் செல்வத்தின்மீதோ தெய்வ சாபம் இருக்கிறது' என்பது. இதன் கருத்தாவது: குபேர சம்பத்தில் குதாகலித்திருக்கும் இந்த நிலே எந்தக் காலத்திலும் நீங்கா திருக்கும் என்ற அமெரிக்கர் நிணப்பது தவறு. 'நிறை செல்வம் நீரில் சுருட்டும் கெடுந்திரைகள்'. நாமோ கட**வு**ளயும் **அ**றத்தையும் நம்பிக் கிடக்கி*ரு*ம். நாம் கைவிடப்படோம்; கிழே விழினும் மீண்டும் எழுந்தெடுவோம். அமெரிக்கா வீழ்ந்தாலோ அதோ கதி தான். ஆதனின் தேசம் நிறம் சாதி குறுக்கெடவின்றி, உலக மக்கள் எல்லாம் உடன்பிறப்பென்று உணர்ந்து மனிதனுக்கு மனிதன் அன்பு செய்யும் உயரிய வாழ்க்கை இலட்சியம்,

''தூய உள்ளம் அன்புள்ளம் பெரிய உள்ளம் தொல்லுலக மக்கள் எலாம் ஒன்றே என்னும் தாயுள்ளம், '

' ஒன்றே குலமும்; ஒருவனே தேவனும்' என்ற உறுதி, 'யாதும் ஊரே; யாவரும் கேளிர்' என்ற எக்களிப்பு: இவை தமிழ்க் கல்வியின் பயன்.

நமது 'சமூகத்தின் விளேவுக்கு நீரா'கவும், 'உரிமைச் செம்பயி ருக்கு வேரா'கவும் இருப்பது, அமுதென்று பேர்படைத்த நமதின்பத் தமிழே. தீதற்ற வாய்மை, நீதியால் வந்த நெடுந் தருமநெறி, என்னும் உயிரின் இரு பெருந் தத்துவங்களே ஆதரவாகக் கொண்டிருப்பதால், தமிழணங்கு ஆயிரம் ஆயிரம் ஆண்டுகளாகவும் தன் நிலே தளராது, கண்னி எழிலுடன் இலங்குகின்றுள். திசை பலவும் சென்றேறித், தேசம் பலவும் ஒளி வீசிய தமிழ்க் கணல், நின்றவியாவாறு செய் வார்த்து, சூழ் இருள் ரீக்கிய பெருமகன்—வண்மைத் தமிழை வாழ வைத்த வள்ளல் நமது அண்ணுமலே யண்ணல். தமிழர் மறந்தாலும் அவர்களேத் தமிழ் மறவாது.

> என்றும் இருக்க உளங்கொண்டாய் இன்பத் தமிழுக் காதரவாய். பொன்றும் உலகில் தமிழாலே புகழ்கொண் டூயர்க்தோர் பலர், பண்டே. இன்று தமிழன் கலேவிளக்கை ஏற்றி உலகில் ஒளி செய்தாய். என்றும் தமிழ்ஙின் உயிர்ப்பன்ரே? இறவாத் தமிழோ டிருப்பாய் கீ.

> > கு. அருணுசலம்.

திருக்குறளும் கம்பராமாயணமும்

(Vidwan, M. Arunachalam Pillai)

தெய்வப்புலமைத் திருவள்ளுவசென்னும் புலவர் பெருமானல், இற்றைக்கு ஆயிரத்தெண்ணூற ஆண்டுகட்கு முன்னரே ஆக்கியருளப் பெற்ற திருக்குறளென்னும் சிறந்த நீதி நூலின் அருமை பெருமைகளே அறியாதாரிலர். அந்நூலின்கண் ஒவ்வொரு குறட்டாவினுங் காணப் படும் சொற்செறிவும் பொருட்பொலிவும் ஆழ்ந்த கருத்துக்களும் கற்பா ருள்ள த்தைக் கனிவிக்கும் இயல்புவாய்ந்தன. சங்கத்துச் சான்றோர் செய்யுட்கள் முதலாக இன்றுகாறும் எழுந்த நூலுரைகள் எல்லாவற்றி னும் திருக்குறளின் ஈறுமணங்கமழாதன இல்ஃபெனின் அதுமிகை அர்நூல், ரம்செர்தமிழ் நாட்டில் தோன்றியதெனினும், சொற்பொருட் சுவையிலீடுபட்ட வேற்றுமொழியாளரும் அதன் வேற்று நாட்டவரும் ஒன்றற்கொன்றுெவ்வாது மாறுபட்ட கோட்பா டுடையார் பலரும் அதனே விரைக்கு பெற்றுத்தமக்கேற்ற பெற்றியின் அமைத்துச் சுவைத்து இன்புறுகின்றன சென்பதும் உலகறிந்த தொன் ரும். இங்ஙனம் எல்லாவகையானும் மேம்பாடெய்திய அத்தெய்வத் திருக்குறணு அக்கு அறிவாற்றல் நிரம்பிய பெரியார்பலர் உரை கண்டுள் ளாராயினும், இப்போது வழங்கிவரும் ஒரு சிலவுரைகளில் பரிமே லழகர் உரையே அர்நூலின் உண்மைப் பொருளேக்கண்டு திளேத்து இன்புறு தற்கு உதவியளித்து வருகின்றது. ''வள்ளுவன் மீளவும் வர்து தித்துலகோர்க்கு, உள்ளிய பொருளே யுசைத்தன னென்ன,...... விழுப்பொருள் தோன்ற விரித்தினி துரைத்தனன்'' என இவர் உரைப் பாயிரமும் பாராட்டுகின்ற தாகலின், இக்கட்டுரையில் அவ்வுரைக்கருத் தும் ஒரோவழி யெடுத்தாளப்படுதல் பொருத்தமுடையதாகும். யிற் பெரியன், கவிச்சக்காவர்த்தி யெனச் சிறப்பித்துரைக்கப் பெறும் கம்பராடர் தாமியற்றிய இராமாவதாரமென்னும் பெருங்காப்பியத்தில், திருக்குறளின் சொற்பொருள்களேயும் கருத்துக்களேயும் எடுத்தாண் டுள்ள முறையைச் சில செய்யுட்களின் வாயிலாக விளக்கிக்காட்டு தலே

கிறைக்த நூலறிவும் ஒருங்கமையப்பெற்ற உயரிய கிஃயினராதலின், பிறர் கூறுவன எல்லாவற்றையும் அவ்வாறே யேற்றுக்கொள்ளாமல் ''எப்பொருள் யார் யார்வாய்க் கேட்பினு மப்பொருள், மெய்ப்பொருள் காண்ப தறிவு'' என்னும் பொய்யாமொழியைக் கடைப்பிடித்துத் தாமும் பலவகையிலாராய்க்து உண்மை துணிவதுடன் புதியமுறைகளே யுங் கையாளுவசென்பதை அவர் நூலின்கட் பலவிடத்துங் காணலாம். அவற்றுட் சிலவருமாறு:—

> '' ஈன்ற பொழுதிற் பெரிதுவக்குர் தன்மக‱ச் சான்ரே னெனக்கேட்ட தாய் ''

புதல்வரைப் பெறுதல் என்னும் அதிகாரத்திலுள்ளது. ''தன் மகணேக் கல்வி கேள்விகளால் நிறைந்தானென்று அறிவுடை யார் சொல்லக்கேட்டதாய் தான் பெற்ற பொழுதை மகிழ்ச்சி யினும் மிக மகிழ்வாள்" என்பது அதன் பொருள். இங்ஙனம் உரை பெழுதிய பரிமேலழகர், பெரிதாவக்குமெனவும் கேட்டதாயெனவும் தெய்வப்புலவர் கூறியதற்குக் காரணமிருத்தல் வேண்டுமெனக்கரு திக், '' கவானின் மகற்கண்ட பொதுவுவகையினும் சான்ருேனெனக் கேட்ட சிறப்புவகை பெரிதாகலிற் பெரிதுவக்குமெனவும் பெண்ணியல்பால் தானை அறியாமையிற் கேட்டதாயெனவுங்கூறினு'' பெனவும், '' தாயு வகைக்கு அளவின்மையின் அஃத இதறைற் பிரித்துக் கூறப்பட்டது " எனவும் விளக்கமும் எழுதியுள்ளார். ஒருதாய், கருவுற்றநாள் முதல் மயற்கை கோயானும், தக்கவாறு உணவுட்கொள்ள இயலாமையால் உடல் மெலிர்து தன்வயபிழர்து அக்கருவைச் சுமர்து திரிதலாலுண்டா கும் வருத்தத்தானும், பொறையுயிர்க்குங்காலுண்டாகும் கோவானும் அடைந்த துன்பங்கள் அனேத்தையுமறந்து, தன்மடியின்கணிருந்து பல்லாற்று னும் இன்பு அத்தும் மகணக்கண்டு உவகையெய்து கின்றுள். அம்மகன், எதிர்காலத்தில் நற்குண நற்செய்கைகளே யுடையனுய்த் கன்ணே அகமகிழ்விப்பனே அல்லலு அவிப்பனே அஃதா அது போழ்து அறியப்படாமையின் அவ்வுவகையைப் பொதுவுவகையெனவும், கல்வி கேள் விகளால் நிறைந்தானென்று அறிவுடையார் கூறக் கேட்ட அளவில், இப்பிறப்பானெய்தும் பெரும்பேற்றை அம்மகப் பேற்ருலெய்தி*ளை* க உவகையுறு தலின் அதனேச் சிறப்புவகை யெனவும் எழுதியது மிகப் பொருந்தும். அன்றிக் கவானின் மகற் கண்டின்புறு தல், மகற்பெற்று _{சனே வர்க்கும்} பொ*துவாகளின் அதணேப் பொது*வுவகை யெனவும், சான்ருேனெனக் கேட்டின்புறுதல், நண்மகற்பெற்றுர்க்கே யுரித்தாக லின் அதனேச் சிறப்புவகையெனவுங் கூறிஞ்ரெனினும் அமையும். அறிவிக்க அறிந்து கடைப்பிடித்து ஒழுகுதலன்றித் தாமாக நன்றுந் தீதுங்கண்டுணரும் பெற்றிமை பெண்பாலார்க்கு இயல்பாக இல்லே யெனக்கருத்ஞராதலின் கேட்டதாயென்றதற்கு அவ்வாறு விசேடம் எழுதினர். அவை நிற்க.

<u>கம் கல்வியிற் பெரியராய கம்பகாடர் இக் குறனே ஊன்றிப் பார்க்</u> சான்*ரே*வெனைக் கேட்டதாய் ஈன்ற ஞான் றி ஹும் பெரி துவப்பானெனவே, தர்தை மைந்தனது சான்றுண்மையைத் அறிர்து மகிழ்வனென்பது பெறப்படுகின்றது. அறிர்து மகிழ்தலினும் தக்கார் வாய்க்கேட்டுப் **பெரிதுமகி**ழ்<mark>தல</mark>் ஒரு தக்தைக்கும் உண்டாதல் ஒரு தஃயாமென்ப துணர்க்து, தாயைப் பற்றிக்கூறிய இக்குறட் கருத்தை ஒரு தங்தைக் கேற்றிக்கூற முற்படு ஆண் நவிக்தடங்கிய கொள்கைச் சாண்ரோரகிய வசிட்ட ரையும் சூழ்ச்சித்துணவராகிய அமைச்சர் பல்லாயிரவரையும் ஒருங்கு கூட்டி அவரை ரோக்கி, இராமனுக்கு முடிசூட்டி அரசிர்து காட்டிற் சென்று அருந்தவஞ்செய்ய எண்ணியுள்ளேன். நம் கருத்தென்ணே ? யெனத் தசாதன் வினவியகாஃ, வசிட்டமுனிவர் இராமனுடைய பெறற் கரும்பெருங் குணங்களேயும் செயற்கருக் தீரச்செயல்களேயும் பாராட்டிக் கூறத்தொடங்கி, அரசே, கின்குலத்து தித்த முன்ணேயோராய மன்ன வர் பலர் கேமியுருட்டிப் பூமிபுரக்தனராயினும் இராமணேப்பெற்றுர் எவருமிலர்; கின்னேப்பிரிக்க கிலமகள் கண்ணிழந்தாள்போலக் கவலே யுருவண்ணம் நின்மகன் அவளேக்காத்தல் செய்வான்; ஆக்கல் காத்தல் அழித்தலென்னும் முத்தொழி**லியற்றும் முதற்கடவு**ளர் மூவரை யொப்ப அத்தொழிலியற்றும் ஆற்ற**ல்பி**க்குடை**யான் அ**வனைக்கின், அறத்தின் மூர்த்தியேவர்து அவதரித்தானென்று சொல்லற்கு எற்றவ ைகென்றுன்; தன்னுயிர்க்கு கல்லனென்றுதல் தன்னேப் பயர்த கின் னுபிர்க்கு நல்லனென்*ரு த*ல் கூறுதல் அவன் பெருமைக்கு எலாது; உலகத்து மன்னுயிர்க்கெல்லாம் நல்லனென்றலே பேற்புடையதாகும்.; அவன் பெயரை ஒருமுறை ஓதிய அளவானே துன்பங்கள்பல ரீங்கு தலே அநபவத்திற் கண்டறிக்தாராதலின், அக்தணர் முதலிய எல்லோரும் தார்தாஞ்செய்த அறத்தின் பயனென்றே அவனே மதிக்கின்றனர்; கற்றவரும் மற்றவரும் தாம் உண்ணும் நீரினும் உயிரினுமேலாக அவினப் போற்றுகின்றனர்; மக்களிலாதல் வானவரிலாதல் அறகெறி பிழையாது ஆட்கிபுரிவோரில் இராமீனப்போலச் சிறந்தவர் ஒருவரு மிலர். ஆதலின் அவனுக்கு அரசுரிமையீதல் எவ்வாற்றுனும் இயைவ தாகும். 6 முன்னர் வேள்கிபல வியற்றி மேன்மையுற்றணே யாதலின் இனி அருந்தவம் புரிதலும் அடுக்கும். இவ்கிரண்டும் விரைந்த செயற் பாலனவேயென்று கூறிமுடித்தார். இந்நிலேயிற் கம்பர்கூறும் பாட லாவது,

> '' மற்ற வன்சொன்ன வாசகங் கேட்டலு மக‱ப் பெற்ற வன்றினும் பிஞ்ஞகன் பிடித்தவப் பெருளில் இன்ற வன்றினும் எரிமழு வாளவன் இழுக்கம் உற்ற வன்றினும் பெரியதோ ருவகைய ஞஞன்''

என்பதாம். ''தன் மகணேச் சான்றேனெனக் கேட்டதாய் ஈன்ற பொழுதிற் பெரி தவக்கு'' மென்ற குறட் கருத்தை ஒரு தங்கைக் கேற்று முகமாக ''மற்றவன் சொன்ன வாசகங்கேட்டலு மகணேப், பெற்ற அன்றினும்......பெரியதோ ருவகையனுன்'' என்று அச் சொல்ஃயும் பொருளேயும் எடுத்தாண்டனர். இன்னும் இப்பாடலே யுற்று கோக்கிற் பல செய்திகள் புலனுகின்றன. வள்ளுவர், நல்ல மக*ே*ன யீன்றெடுத்த ஒரு தாயின் மன நிலேயை அளந்து கூறினராத வின், ஈன்*ற பொழு திற்* பெரி துவக்கு மென்றலே அமையும். இவர் ஒரு தந்தை மேல் வைத்துக் கூறுதலால் அவ்வளவின் நிறுத்துதல் போதியதாகாது. மகனுடைய அறிவு ஆற்றல் முதலிய நலவளர்ச்சி யிற் கண்ணுங் கருத்தமா யிருப்பவன் தந்தையாகலின், இராமனுடைய வீரச் செயல்களேப் பற்றித் தயரதன் கண்டுங் கேட்டும் அறிந்தவற்றை யும் நிணே விற்குக் கொண்டு வருகின்றுர். அறபதினையிரம் ஆண்டுகள் கழிர்த பின்னரும் புதல்வர்ப் பேறின்றி 'எற்பின் வையகம் மறுகுறு மென்பதோர் மறுக்க' முற்ற மன்னனுக்கு அப்புதல்வற்பேறு அம் மறுக்கர் நீர்ந்து இன்புறுதற்கு எதுவாயிற்றுகலின், முதலில் மகணேப் பெற்ற அன்றினு மென்ருர். பின்னர், மி திஃயிற் சிவத நசை முறித்தா னென்ற தீரச் செயீலத் தூதர் வாய் மொழியானும் திருமுகத்தானுங் கேட்டறிந்த போழ்து, முன் பெற்ற ஞான்றெய்திய உவகையினுமிகு தி யாக ' மஃ யென வளர் ந்தன வயிரத்தோள்களே' என்னும்படி உடல் பூரித்து உள்ளத்து உவகை பூத்தாஞதலின், இரண்டாவதாக வில்லி *றுத்த* செய்தி கூ**றிஞர்.** மிதிஃயினின்*ற* அயோத்திக்குத் திரும்புங்

கால், எதிர்ப்பட்ட பாசுராமணப் பலவாறு குறையிரந்து வேண்டியும், அதற்கெணங்காது வெகுண்டு நின்று பொருதற் கழைத்த அவனுக் ... காற்*ருத*ை மயங்கித் தான்பக் கடேவில் வீழ்ந்தா கிடெந்**த மன்னவன்,** தன் மகனுல் அப்பாசுராமன் தோல்வி யுற்றமையைக் கண்டு 'களிப்பெனுங் கரையிலாக் கடலில் ஆழ்ந்தன'ஞதலின், அவ்விரண்டினு மேற்பட்ட இவ்வென்றியை மூன்ருவதாகக் கூறினர். இம்மூன்றும் ஒன்றற் கொன்று மிகுதியாக உவப்பிப்பனவாகவும் இவ்வெல்லாவற்றினு மேலாக 'மற்றவன் சொன்ன வாசகங் கேட்டலும்.....பெரியதோரு வகையனுன்' என்ற தற்குக் காரண மென்ணேயெனின், மகணேப் பெற்றது முதனிய மூன்றும் தானே கண்டும் தூதர் வாய்க் கேட்டும் உவகையுறு தற்கு ஏதுவாயின. தான் மகவாசையால் மயங்கி அளவின் மேற்பட மகிழ்ர்திருத்தலுங் கூடும். பிறர்க்கு அவை மகிழ்ச்சிதாரா மலு பிருக்கலாம். இவை குறித்துப் பிறர் நிணவுபாதாகுமோ என்ற ஐயப்பாடு தயாதனுக்கு உண்டு. இதனே ''மகவயின் அன்பிஞல் மயங்கியானிது, புக்ஸரீர் புகன்ற இப்பொம்மல் வாசகம், உகவையின் மொழிர்ததோ வுள்ள ரோக்கியோ, தகவென கிணேர்ததோ தன்மை யென்னென்றுன் '' எனப் பின்னர் அரசரை கோக்கி அவன் கூறிய வாற்ரு அணரலாம். அன்றியும், ஒருவர் மற்றெருவரைப் பாராட்டிக் கூறுவதிற் பலதிறம் உண்டு. பாராட்டப்படுவோர்பால் அதற் கேற்ற குணஞ் செயல்கள் இல்ஃபெனினும், அவராற் பெறும் பயனிற் பற்றுவைத்துத் தனியிடத்தில் அவரை வாயாரப் புகழ்ந்து கூறிவிட்டு, அறிவுடையார் முன்னிஃயில் அங்ஙனங் கூற மனந்துணியாது வாய் வாளா திருத்தலுஞ் செய்வர் தக்கவரல்லாதார். இங்கு அங்ஙனமன் றித் தன் ஐயப்பாடும் சீங்கும்படி, விழைவு வெறுப்பற்ற முனிவர் த**ஃ** வரும் தன் குலகுருவுமாகிய வகிட்டர், அறிவிற் கிறக்த அமைச்சர் அறபதிடையி வர் முன்னி ஃயில், தன் மகணேக் குறித்துத் தான் மதித் திருந்த அளவினு மேலாகப் பாராட்டிக்கூறிய உண்மை யுரைகளேச் செவி கிரம்பக் கேட்டுத், தர்தை மகற்காற்று என்றியையும் மகன் pr்தைக் கா*ற்று*ம் உதவியையும் ஒருங்கெய்*த*ப் பெற்றேன், இதனி*னு*ம் சிறப்ப இனி யெய்தற்பால தொ**ன்றில்**லே யெ**ன மிகவு**ம் உவகையுற்*ரு* தைவின், பெரியதோருவகையனுன் என்முர். அங்குத் தாயின் மன கிலேயை விதர்து கூறியதோர் குறீன பெடுத்து இங்குத் தர்தையொரு வர்க் கேற்றி அழகு படுத்தியிருப்பது பாராட்டத் தக்கதாம்.

'' எளிதென இல்லிறப்பான் எய்துமெஞ் ஞான்றும் வீளியாது நிற்கும் பழி''

என்பது பிறனில் விழையாடை யென்னும் அதிகாரத்திலுள்ள தாகும். "எய்து தல் எளிதென்று கரு திப் பின் விளயும் பகை பழிபாவங்களேக் கரு தாது அயலான் மண்யாளிடத்து நெறி கடந்து செல்வானுருவன், மாய்தலின்றி எக்காலத்தும் நிலேநிற்குங் குடிப்பழியிணே யெய்துவான்" என்பது இதண் பொருள். இங்ஙனம் ஒராண்பால்மேல் வைத்துக் கூறியது உபலக்கணத்தாற் பெண்பாற்கும் எய்துமாயினும், இத்தீச் செயல் ஒரு பெண் மகளிடத்து நிகழின் அவளும் எஞ்ஞான்றும் வியாது நிற்கும் பழியிண யெய்துவ ளென்பதை வெளிப்படையாகக் கூறவேண்டுமெனக் கருதிய ஆசிரியர், தம் காப்பியத்தில் அதற்கு வாய்ப்பான தோரிடம் பார்த்து அமைக்கின்றுர். அஃதாவது:—

''சரந்தரு சாப மல்லால் தடுப்பருஞ் சாபம் வல்ல வரந்தரு முனிவ ஞங்கே வருதலும் வெருவி மாயா கிரந்தரம் உலகில் நிற்கும் நெடும்பழி பூண்டாள் நின்றுள் புரந்தரன் வெருவி யாங்கோர் பூசையாய்ப் போக லுற்றுன் ''

அகலிகையானவள், தன் கணவனுருத்தாங்கி என்பதாம். இந்தொணுடு கூடி இன்புற்றிருக்குங்கால், கௌதமர் ஆங்குவாவே, அவள் அச்சமுற்று தங்கி நின்றுள். இந்திரன் பூணே வடிவெடுத்து வெளியே போகத் தொடங்கினுன் என்பது வரலாறு. இக்கிஃயில், அகளிகை நெறி பிறழ்ந்து அயலானுருவணக் காதளித்திலளாயினும், கணவனெனக் கரு திய இர்திரனுடு கூடிப் புதுமண மதுவின் தேறில ஒக்க வுண்டிருர்த காஃ, இவன் கணவனல்லன் அயலானென்பதை ந**ன்**கு உணர்ந்த பின்னும், முன்னர்ப் பயின்றறியா*த* அப்பு கிய வின் பத்திற் பயிர்ப்பின்றி ஈடுபட்டிருந்தது பெருந்தவருமாதலின், அவள் மேற் பழியைச் சுமத்துகின்றுர். தான் கருதாத நிஃயிலும் பிறஞெரு வன் தன்னேக் காதல் கோக்கத்துடன் காண்டற்கு இலக்காய் கிற்பின் அதுவே தனக்கு இழுக்கெனக் கோடல் கற்புடை மகட்கு இயல்பாம். '' மண்டிணி ஞாலத்து மழை வளர்தரூடம், பெண்டிராயிற் பிறர் கெஞ்சு புகாஅர், புக்கேன் பிறனுளம் (ஆதலால்) புரிநூல் மார்பன், முத்தீப் பேணு முறைபெனக் கெல்ஃ'' என்ற பத்தினிப் பெண்ணெருத்தி கூறியது காணலாம். வாம்பிறந்து சென்று வஞ்சச் சூழ்ச்சியால் அயலான் மணே வியை அநபவித்த இந்தொன் மேல் அப்பழியை யேற்றி யிருப்பாராயின் திருக்குறட் கருத்தை மேரே பெடுத்தாண்டா சென்ன லாம். இவ்விடம் அதற்கு மிகவும் பொருத்த முடையதாகும். அங் நன மன்றி அகலிகையின் பால் அப்பழியை அடைவித்தலால், மக ளிர்க்கும் அக்கருத்தை யேற்றிக் கூறவேண்டு மெனக் கருதிஞென்பது வெளியாகின் றது. இனி இவ்விரு பெருமக்களின் பாடற் பகு தியை யும் ஒப்பிட்டுப் பார்ப்போம். அவை, ''இல்லிறப்பான் எய்தும் எஞ் ஞான்றும் விளியாது நிற்கும் பழி" "மாயா நிரந்தரம் உலகில் நிற் கும் கெடும்பழி பூண்டாள்" என்பனவாம். இவற்றுள், எஞ்ஞான்றம் என்பதற்கு நிரந்தாம் எனவும், விளியாது என்பதற்கு மாயா எனவும், கிற்கும் பழி யெய்தும் என்பதற்கு உலகில் கிற்கும் நெடும்பழி பூண் டாள் எனவும் ஒவ்வொன்றற்கும் கேரான சொல்லே கிறுத்தமைத் தெருத்தல் காணலாம். ஆயினும், நெடும்பழியென நெடுமைச் சொல் ஒன்றணே மிகுத்துப் பெய்திருத்தல் கோக்கத்தக்கது. ஆடவனெரு வன், அயலான் மணேவியைக் காதலிக்கும் திய ஒழுக்கத்தை மேற் கொள்வானுயின், அதனுைண்டாகும் பழி எஞ்ஞான்றும் வீயாது நிற்குமாயினும் அவன் வாணுள் ஒழிவில் தானுமொழியும். ஒரு பெண் மகள் பால் இப்பாத்தமைத் தீச்செயல் நிலவுமாயின், அதனுவண்டாம் பழியை அவள் அளவினைன்றி அவள் வயிற்றுப் பிறந்த பிள்ளேகள் மீதும் உலகம் ஏற்றித் தூற்றுமாகலின் நெடும்பழி யென்றுர் எனக் கோடல் பொருக்தும். இங்ஙனம் வள்ளுவர் வாய்மொழியை மனத் துட் கொண்டு கூறிஞராயினும் தாம் கூறுமிடத்திற் கேற்ப கிறுத்துணர்க்து சொற்பெய்திருக்குக்திறன் அறிக்து இன்புறுதற்குரிய தொன்றும்.

> '' துஞ்சினர் செத்தாரின் வேறல்லர் எஞ்ஞான்றும் நஞ்சுண்பார் கள்ளுண் பவர்''

என்பது கள்ளுண்ணுமை யென்னும் அதிகாரத்திலுள்ளது. ''உறங்கி ஞர் செத்தாரின் வேருதலுடையரேனும் அக்காலத்து அறிவின்மை யால் வேறெனப்படார். அவ்வாறே, கள்ளுண்பார் நஞ்சுண்பாரின் வேருதலுடையரேனும் அக்காலத்து அறிவின்மையால் வேறெனப் படார்; அவர் தாமேயாவர்'' என்பது பரிமேலழகர் உரை. இக் குறளின் பிற்பகு தியே ஈண்டு எடுத்துக்கொள்ளப்படுவது. அது, கள்ளுண்பவரும் நஞ்சுண்பவரும் ஒரு நிலேயினராவரென்பதாம். இங் வணம் கள்ளுண்டலும் நஞ்சுண்டலும் தம்முள் ஒக்குமென்பதை யேற் றுக்கொள்ளு தற்குக் கம்பருள்ளம் ஒருப்படவில்ல யா தலின், அவ்வ தி காரத் திலுள்ள ஏனேய குறட்பாக்களேயும் காணத் தொடங்கினர். பகை வர்க் கெளியராதல், நன்கு மதிக்கற்பாடும் நாணுமிழக்கல், சான்றே ரானும் ஈன்ற தாயானும் வெறுத்தொதுக்கப்படுதல், பிறரால் எள்ளி நகையாடப்படுதல், பொருள் கொடுத்து மெய்ம்மறப்பு சோர்வு என்ப வற்றை மேற்கொள்ளல், திரிக்கப்படாமை முதலிய குற்றங்கள் கள்ளுண்டார்பாற் காணப்படும் என்று கூறப்பட்டிருத்தலேக் கண்டார். இங்ஙனம் பல்வகைத் துன்பங்களுக்குங் காரணமாய நீக்குணங்களும் அவற்றின் பயனை நாகத் துன்பம் அநுபவித்தலும் பயப்பதாய கள்ளுண்டற்கும், தன்னே யுண்டாரைத் தானுண்ணு தலாகிய ஒன்றே செய்யவல்ல நஞ்சுண்டற்கும் வேறுபாடு பெரி துளதென்பதை உளத் துட்கொண்டு, இக்கருத்துக்களெல்லாவற்றையும் அடக்கி அவ்விரண்டன் இயல்பையும் விளக்குவாராய்,

" வஞ்சமுங் களவும் பொய்யும் மயக்கமு மரமில் கொட்பும் தஞ்சமென் ருரை நீக்குந் தன்மையுங் களிப்புந் தாக்கும் கஞ்சமெல் லணங்குந் தீருங் கள்ளிஞல் அருந்தி ஒரை நஞ்சமுங் கொல்வ தல்லால் நரகிணே நல்கா தன்றே"

என்முர். இனி, இக்குறட்பாவுக்குத் திரிக்கப்படுதலால் உறங்கினரும் நஞ்சுண்பாரு மொப்பர். கைவிடப்படுதலால் செத்தாருங் கள்ளுண் பாரு மொப்பர் என நிரல் நிறையாக்கிப் பொருள் கூறுவாரு முளர். அவ்வாறு கூறினும், ஒரு நாள் ஒரு பொழுதைத் துண்பம் பயப்பதாய இறத்தலுக்கும், பழிபாவங்களேப் பயந்த இம்மை மறுமை யிரண்டினும் இடையருத் துன்பம் விளேக்கும் கள்ளுண்டலுக்கும் வேற்றுமை பெரிது முளதாகலின், கள்ளுண்டல் எவ்வாற்றுனுங் கொடிதென்பது பெறப்படும். இங்கு, நஞ்சுண்பார் கள்ளுண்பவர் என்பதை மேற் கொண்டே கம்பர் அவ்விரண்டற்கும் வேற்றுமை காட்டுவாராயினர்.

'' பகல்வெல்லுங் கூகையைக் காக்கை யிகல்வெல்லும் வேந்தர்க்கு வேண்டும் பொழுது ''

என்பது காலமறிதல் என்னும் அதிகாரத்திலுள்ளது. ''தன்னின் வலிதாகிய கூகையைக் காக்கை பகற் பொழுதின்கண் வெல்லா நிற்கும். அதுபோல, பகைவோது இகலே வெல்லக் கருதும் அரசர்க்கு அதற் கேற்ற காலம் இன்றியமையாது'' என்பது இதன் பொருள். வகிய அரசாயினும் காலம் அல்லாத காலத்துப் போர் செய்யத் தொடங்குவ ராயின் எளியரானும் வெல்லப்படுவராதலின், காலமல்லா வழி வலியாற் பயனில்லே யென்பதை விளக்கு தற்கு உவமையாக இதன் முற்பகு தி யெடுத்துக் காட்டப்பட்டது. மி திலே வேர்தன்பாலுள்ள இறைவன் வில்லே வளே த்தாரே மை திலியை மணத்தற்கு ரியாரென்று உறுதி கூறி யதை யுணர்ர்த மன்னர் பலர், அவ்வல் வில்லே வளேக்கும் ஆற்றல் இல ராயினமையின், மாரவேள் வளேகருப்பு மெல்வில்லுக்கும் ஆற்றுராய்ச் சீதையின்மேற் காதல்கொண்டு மோதமர் விளேக்க மூண்டு நீண்டிராட் பொருதனர். அம்மன்னர் பலர் முன்னிலேயில் தன்னர்தனியனும் நின்று போர் செய்து மெலிவுற்ற சனகன், தேவரை வேண்டிப் படை கள் பெற்றனன். இதனேயறிர்த அளவில் அவர் அஞ்சியோடினு சென்னு மிடத்தில்,

''வேர்நர், அற்காக்கை கூகையைக்கண் டஞ்சினவா மெனவகன்ரூர் ''

என்றுர் கம்பர். 'பகல்வெல்லுங் கூகையைக் காக்கை" என்றதன் அருத்தாப்த்தியால், இரவில் காக்கையைக் கூகை வெல்லும் என்பது பெறப்படும். 'ஆயிரங் காக்கைக் கோர்கல்' என்றபடி, இரவுத் துணே பெற்ற வலிய கூகை யொன்றணேக் கண்டு, மிகப் பல காக்கைகள் வெருண் டோடுதல்போன்று, பலரொடும் பலகாலம் பொருது மெலிவுற்ற மிதிலே வேர்தன் விண்ணவாருளாற் படைவலி பெற்றுனென்ற அளவில் பகை மன்னரெல்லோருர் திரண்டோடியமைக்கு, இவ்வருத்தாபத்திப் பொருளே தக்க எடுத்துக் காட்டாமென நிணேர்து மாற்றிக் கூறிய திறம் போற்றற்குரியது.

இங்ஙனம் உலகியில நுனித்துணர்ந்து மக்கள் உள்ளத்திற் பதியு மாறு செய்யுள் இயற்றுதலில் ஒப்பாரும் மிக்காரும் இலராய கம்ப பென்னும் புலவர்பெருமான், திருக்குறளின் சொற்பொருள்களேயும் கருத்துக்களேயும் எடுத்துத் தம் நூலின்கண் தக்க இடனறிந்து அவ்வவ் விடத்திற்கேற்ப மாற்றியமைத்து அழகுபடுத்தி யிருப்பது சுவை யுணர்ந்து படித்து இன்புறுதற்குரியதாகும். இவைபோன்று இண்னும் பலவுளவேனும் விரிவஞ்சி இம்மட்டில் நிறுத்தப்பட்டது. ஹானரயிள் டாக்டர், ராஜா ஸர் அண்ணும**ஃச் செட்டியா**ர் அவர்களின் அறுபதாம் ஆண்டு கிறைவு விழாக் கொண்டாட்டத்தில்

வித்துவான் மு. அகுணுசலம் பிள்கோ பாடிய

வாழ்த்துப்பாக்கள்.

முதாகீ ருலகில் முத்தமிழால் முரன்று வணகா லொளிர்முத்தால் மூவா மருந்து நுகர்பதியும் மொழிய லாகா துவமைபெனத் துதிசேர் வழுதி வளநாட்டில், தொழிலாற் பொருளா லறச்செயலால் துகளி வின்பத் தாவிறைவன் தோழு னகரை வென்றுபுகழ் கதுவா நிற்குங் காதுடு காத்தா வேரு ஹான் னகர்க் கணியாய்க் கதிர்த்த செல்வன் முத்வதையவேள் கருத்திற்கனிக்து செயுந்தவத்தாற் புதுகீர் மையதா யறத்தினுருப் பொலிவுற் றெனவர் துதயஞ்செய் பூமான் அண்று மேலையரசன் புகழ்கீ டூழி வாழியவே.

தக்க குணஞ்சால் பொருள்வணிகர் தழைத்த மரபிற் பட்டினத்துச் சாமி யுதித்த பெருங்குடியின் சால்பு வளரச், சைவரெறி மிக்குப் பாவ, அருள்பெருக, மேன்மை யறங்கள் குதுகலிப்ப, விளங்கு கலேமா துளங்குளிர, வியஞர் திருவும் பயனுறவே, திக்கெட் டினும்வாழ் பவர்மகிழச், சிர்தா மணியும் ஐர்தருவும் திகழுங் காம தேனுவொடு தெய்வ சிதியுர் தொண்டொருங்கு மக்கள் வடிவின் வர்தமைபோல் மன்னிப் பிறர்த நன்னயஞ்சேர் மன்னன் அண்றைமேல் தேரிரில் வண்மைக்கிணேயோ மழைமுகிலே! 2

எண்ணுங் கருமம் எண்ணியவா றியற்றுக் திறலும் நூலறிவும் இணேயில் சூழ்ச்சி மதிவலியும் எவரும் போற்றும் பெருக்திருவும் கண்ணும் பெருமை யுறலாலும், ஞூல முளகா றினி தியலும் கலமா சறங்கள் செயலாலும் காளு மவைகண் டுளமகிழ்க்து கண்ணும் உயிரும் போலுலகங் காக்கு மசசர் பெருமாஞர், கவிஞர் டாக்டர் சாஜாஸர் முதலாம் விருது களுமுதவி விண்ணின் மணிபோல் ஒளிபரப்பு வித்தா செனிலெம் பெருங்குணைத்து வேக்தன் அண்றை மீலிக்குகிகர் வேரு ருளரிம் மேதினிக்கே! 3 பாண்டி வளரா டாண்டமுடிப் பைக்தார்ச் செழியர் தமிழ் வளர்க்கும் பண்பிற் சிறக்தா செனப்புலவர் பலரும் பலகாற் புகழ்க்தனரால் சுண்டு புகழ் அண் இறை இடுவேன் இயன்முத் தமிழும் வடமொழியும் இனிய வடுகு மஃவாளம் ஏற்ற முறும் ஆங் கிலமுதலா வேண்டு மொழியும் உடன் வளர விழைக்து பலநூ ருயிரம்பொன் விதைத்து கள்கண் டறிவணங்கு மிளிருங் கோயில் பலசமைத்து யாண்டும் இசைத்தூண் காட்டினைல் யாரே மேலாக் தகையசென யானே புகல்வேன் புலவீர்காள் யாவும் பெறுவீர் பாடுமினே. 4

இன்ன தகைசால் பெருமான் நம் ஏந்தல் அண்ணு யணிவள்ளல் இருமுப் பாணண் டினி இனுறும் ஏற்றங் குறித்து நாற்றிசையும் பன்னற் கரிய மகிழ்பூத்த! பசமன் திருமா மணிமன்றிற் பாக முடையாள் காணநடிப் பவன்செய் யருளால் மேன்மேலும் சொன்ன மஃபோல் நிஃபெற்றுத் துரிசில் யாக்கை யூக்கம்வலி தொடர்ந்து வளர நூறுண்டிற் சுகமா மணமா ஃயுஞ்சூடி மன்னும் வாழ்க்கைப் பெருந்தேவி மக்கள் ஒக்கல் புடைசூழும் வாழ்வு தழைத்துப் பல்லாண்டு வாழ்க வெனயாம் வாழ்த்துவமே. 5

ராஜா சர் அண்ணும2ல வள்ளலார் வாழ்த்து

(By Bharathi Dasen)

அகவல்.

மலர் தலே யுலகிற்கு வான்பெரு நாடு பலர்புகழ் ஞாயிறு படைத்தது போன்று பண்ஆர் தமிழ்நாடு பகர் ராஜாசர் அண்ண மலேச்செட் டியாரை இந்தத் தமிழர் இழைத்த தவத்தின் பயனுப் அமிழ்தம் போல அளித்த தன்ரே!

அருளிஞல் அக்கதிர் அம்புலிதன்ணே இருளிஞல் படாமை இழைத்தது போல நல்கலே நயந்த அண்ணுமலேயார் பல்கலே மதிக்கு - ஒளி பாய்ச்சி அருளிஞர் விண்ணுக்கு அத்திங்கள் விளக்காவது போல் மண்ணுக்கு அக்கழகம் மணி விளக்கன்றே!

நிலவு பொழிந்து நிலவு பொழிந்து குலவும் அத்திங்கள் குளிர்செய்வது போல் நண்ணுப் பெரும்பேறு நண்ணு ராஜாசர் அண்ணுமலேக் கலேக் கழகமோ வெனில் அறம் பொருள் இன்பம் ஆம்வீட்டறிவின் திறம் பொழிந்து திறம் பொழிந்து மடமையாம் வெப்பினே வறமையாம் பிணியிண நடமின்'என்று நடத்தித் தீர்த்துக் குளிரினேப் பெரிதும் கொழிக்கின்றதுவே! பன்னரும் புகழிணப் பாரெலாம் செலுத்திய மன்னரும் அறிஞரும் வாழ்க்தஇத் தமிழ்காடு இனிப்புறுங் கரும்பின் நுனிப்புறம் சுவைதேய்க்து போதல் போலப் புனிதம் தேய்க்தும் சாதல் போலத் தளிர்ச்சி எய்தியும் குழிவுறம் கண்ணும் குனிவுறம் தோலுமாய் அழிவுறக் கண்ட அண்ணுடிஃயார் அருளும் அம்பலத் தருகில் மக்கட்குத் தொருளும் அம்பலம் தேடி'அண்ணுமல ககர்'எனப் பேரிட்டு நாவலர் உள்ளமே நிகர் எனப் பெரி தாய், கேயர்போல் ரல்லதாய் பெருந்தமிழ் வேந்தர் பேழைபோல் கண்ணுல் அருந்தமிழ்தாக அமைத்த நிலேயத்துப் பாவிரி புலவர் பலரையும் கூட்டிக் காவிரிப் பெருக்கெனக் கல்விப் பெருக்கைத் தென்னுட்டுளர் தொறும் சேர்த்துத் தென்னுடு பொன்னுடாகப் புரிந்த நன்றியால் அண்ணுமஃப்பேர் அதண நாடொறும் எண்ணுத் தமிழர் எங்கணு மில்ஃ! தெங்கௌங் காய்தொறும் தித்திக்கும் கீர்போல் இங்குளார் உளர்தொறும் இனிக்கின்ற தப்பெயர்!

அணே வரும் அவ்வாறு - அப்பெரு வள்ளல கிணவ தோடு கிற்றலின்றி உண்ணிலவும் அக்கிணப்பு - உவகையொடு புணர்க்து தண்ணிலவு புணர்க்த வண்கடல் போலப் பொங்கிட இங்கொரு புதுகாள் வக்தது புதுகாள் என்எனில் புகல்வேன் கேளிர்: காள் ஒவ்வொன்றும் கன்மதி எதுவும் வேள் இக்த காட்டுக்கு வினேத்த அறங்கண்டு வாழ்த்திச் சென்றன; வாளா கழிக்தில ஆண்டு - ஒவ்வொன்றும் அண்ணுமலேயார் சண்டு மக்கட்கு - இழைத்த கண்மைக்கு நன்றி கூருது நடந்த தில்ஃ!
அண்ணுமீஃயார் அருங்கொடை வாழ்வில் எண்ணு வெறுநாள் எதுவும் இல்ஃ அன்னர் கண்ட அவ்-அறநாட்கள் எனும் மின்னர் பவள மெல்லி தழ்ப் பெண்கள் பற்பலர் அரசரைப் பரவிப் போனபின் அற்புதப் பெண்ணும் அறுபதாம் ஆண்டு மான்போல் வந்து மலர்போற் சிரித்துத், தேன்போல் பேசிச் சேல்போல் விழியால், மங்குல் போலும் வள்ளலாரின் தொங்கல் மார்பைச் சுவைத்து நிற்க, அவர்அவ் வறுபதாம் ஆண்டை அணேந்தனர்.

இருமுப்பான்-ஆண்டு எய்திய அண்ணலார் வருநூற்முண்டையும் மணக்கத் தக்க குன்றத் தோளேயும் குளிர்மலர் விழியையும் அன்றலர் மலர்முகத் தழகையும் கண்ட அவர்மண-என்னரும் அன்னேயாரோ வெனில் புதமணம் கண்ட போது தம் காதலர் மதமணம் கண்ட மலர்க்கை கீட்டி அங்கம் சிலிர்க்க அணிசெய் திட்ட மங்கல நாணயும், மணுளர் தம்மையும் கிள்ளே முதிரை கொள்ளுவதுபோல் அள்ளி முத்தம் அளித்து மகிழ்ந்தார்.

அன்பொடு செட்டிகாட் டாசர் அரசியார் மன்றினில் திருமுக மலர்க்து வீற்றிருக்கப், பொதிகைத் தென்றல் புதுமணம் புரிக்தது! வதிகைப் பரிதி மணிவிளக் கெடுத்தது! முழங்கு தென்கடல் மூரசம் ஆர்த்தது!

பழங்குடிமக்கள் இழந்தவை அனே த்தம் இவை என்ற கொணா ஈன்றதம் மக்கள் அவையினில் இளவாசழகு செய்தனர்.

பாருக்குள் பற் பலகோடி மாந்தரின் வேருக்கு வித்தாய் விளேர்த தொன்மைச் செர்தமிழ் மக்கள் திசையடங்கலும் கர்தமிழ் <mark>ம</mark>ொழியால் தாம்தாம் வாழ்த்திய வாழ்த்தொலி அணேத்தும் மகாவிணேதான் வீழ்த்திய அமுத வெள்ளமோ! தாமரை விரிர்த வாய்தொறும் விண்ணே நணக்கச் சொரிர்த தேனூற்றுத் தொடர்போ! வேய்ங்குழல் இசையின் பிழம்போ! இன் தமிழ்ப் பாட்டொடு பிசைந்து கிடக்கும் பெரும்பயன் தானே! அதிர்த்த தென்கடல் அகடு பூரித்து உதிர்த்த முத்தமோ! உலக மெல்லாம் அகில்கமழ் குன்றின் அணித்து-உளார்கேட்கும் முகில்கமழ் ஓசையோ! மொய்த்த தமிழர்க்கு நண்ணுப் பே**று-**என நண்ணு சாஜா சா அண்ணுமஃயார், அரசியார், மக்கள் வாழ்க பல்லாண்டு வாழ்க சுற்றம் வாழ்க' என்று வாழ்த்திய வரழ்த்தும், வெல்க அன்னர் விரிந்த கொள்கை வெல்கஎன் அரைத்த வெற்றி மொழியும், பல்குக செல்வம் பல்குக இன்பம் பல்குக' என்று பகர்ந்த மொழியும் உண்மை ஞாயிற்று நிலேபோல் திண்மை உடையன ஆகுக சிறக்கே!

அமுதூட்டி அறிவூட்டும்கோயில்

(பாரதி தாலன்)

எண் சீர் விருத்தம்.

இரவினிலே உணவருக்தி காற்காலி யிற்சாய்க் திருந்தேன்இத் தமிழ்நாட்டின் எளிமைதனே எண்ணி! மாவேரிற் புழுப்போலே திமைபல செய்து மாய்கின்ருர் பொதுநலத்தில் நாட்டமில்லே மற்றப் பாதேச மக்களேயும் பார்க்கின்றேம் அங்குப் படிப்புக்கு வசதியுண்டு பிள்ளேகளேப் பெறுவார். குரலுடையார் இங்கெல்லாம் வெறுங்கூச்சலிடுவார் பெருஞ்செல்வர் இருக்கின்முர் கொடைக்குணந்தானில்ஃ. (1)என்றுநான் பலவாறு நிணேத்திருக்கும் நேரம் என்மணேவி வெற்றிலேயும் கையுமாய் வக்தே என்னயோ சணேஎன்றுள் என்னேடி மாதே இராக்காலம் தருவதோர் இன்பத்தை இந்த சின்ன நிலே த் தமிழ்மக்கள் அடைவதில்லே அறிவின் திறமற்ற மக்களுக்குக் காதல்ஒரு கேடா அன்புள்ள பிள்ளேகட்கோ அருங்கல்வி வசதி அணுவளவும் இல்ஃயன்ரு என்று நான் சொன்னேன். (2), தன்னலமே அறியாதார் வாழந்திருந்த இந்தத் தமிழ்நாட்டின் வீழ்ச்சியினே நிஃபெனவே எண்ணி இன்ன ஹற்றீர் சரியன்று முன்னுளில் உழவர் இட்டவிதை ஒன்றிருக்க முளேப்பதுவே முமா கன்னல் உறஞ் சாற்றைப்போல் இர்தஇராப் போதில் க**ே** நுணுக்கம் பேசுகென்றுர் மாணவர்கள் கேளீர் அன்னதைதான் சாஜாசர் அண்ணுமஃப்பல் க்கே தகம் அமுதாட்டி அறிவூட்டும்கோயில். (3)திருக்கோயில் பலகண்டும் சத்திரங்கள் கண்டும்

தென்னுட்டில் வாழ்கின்ற அருமைத் தாய்மார்கள் கருக்கோயில் விட்டுவர்த முருகப் பிள்ளேகள் க‰க்கோலம் பெறப்பலவாம் நி‰க்கழகம் கண்டும் இருக்கும்அவர் பிறசெல்வர் ஈர்துவக்கும் வழியை இன்னதென்றம் காட்டிவிட்டார் இன்னமென்ன தேவை! உருக்கா தீர் கெஞ்சத்தை என்றுரைத்தாள் மணேவி. (4)ஒகோகோ ஒகோகோ அப்படியா செய்தி ஓரிசவில் ஒருதுளியும் இனிமேல் வீணுக்கும் உத்தேசம் எனக்கில்2ல வித்தார மயிலே பாராள ஒரு பிள்ள, படை நடத்தப் பசங்கள், பைக்**தமி**ழ்க்கு*த் தொண்*டுசெய்ய கல்லகல்ல மக்கள் ஏராளமாய் வேண்டும். தவம்புரிவோம். கல்வி ஈயத்தான் அண்ணும்ஃக்கழம் உண்டே பாராயோ என்றுரைத்தேன் காத்திருந்த பாவை பறந்துவந்தாள் ஆநந்த வெள்ளத்திற் பாய்ந்தோம்; (5)

போர் நீக்கிய புலவர்

(Vidwan A. Bhuvaraham Pillai)

பண்டைக் காலத்துக் கோப்பெருஞ் சோழன் என்னும் சோழ மன்னன் சோழ நாட்டை யாண்டு வந்தனன். நற்குணங்களாலும், ஆட்சித் திறனுவம், வீரத்தாலும், பெருங் கொடையாலும் சிறந்து விளங்கிய அம்மன்னன் தமிழ்ப் புலமையிலும் தலேசிறந்து விளங்கினுன். அதனைல் அக்காலத்து விளங்கியபொத்தியார், பிசிராந்தையார், புல்லாற் ஹார் எயிற்றியனர் முதலான புலவர் பலர் மன்னன்பாற் பேரன்புடைய ராய் அவணேத் தம் உயிராகப் போற்றி வந்தனர். மன்னனும் புலவர் களே அங்ஙனமே போற்றி வந்தனன். புலவரோடுகூடி அளவளாவி மகிழ்வதே பெருமகிழ்ச்சியெனக் கருதினன். இவ்வருங்குணத்தை வியந்து,

> '' கோழியோனே கோப்பெருஞ் சோழன் பொத்தில் நண்முற் பொத்தியொடு கெழிஇ வாயார் பெருநகை வைகலும் நக்கே''

எனப் பிகிராக்தையார் கூறுவாராயினர். (கோப்பெருஞ் சோழன் குற்றமற்ற கட்பினேயுடைய பொத்தியென்னும் புலவனேடுகூடி உண்மை கிறைக்த மகிழ்ச்சியை யடைக்து உறையூரின்கண் உள்ளான்.) கோப் பெருஞ் சோழன் சோழகாட்டுத் தலேககராகிய உறையூரின்கண் இருக் தான். பிகிராக்தையார் என்னும் புலவர் பாண்டி காட்டுப் பிகிர் என் னும் ஊரின்கண் இருக்தார். இவ்விருவரும் ஒருவரை ஒருவர் கண்டு அளவளாவிப் பழகிரைல்லர். ஒருவர் பெருமையை ஒருவர் கேட்ட தணேயானே பெருகட்புடையராயினர். மன்னன் உயிர் கீங்கிய காலத்து அவணேப் பிரிக்திருக்க ஆற்றுது பொத்தியார், பிகிராக்தையார் முதலிய புலவர் தாமும் உயிர் கீத்தனர் எனின் அவர் தம் கட்பின் பெருமையும் அரசன் குணப் பெருமையும் அளவிட்டுரைத்தல் இயலுமோ? நட்பின் உயர்கிலக்கு எடுத்துக்காட்டாக விளங்கிய இம்மன்ன ஹுக்குப் புதல்வர் இருவர் இருந்தனர். அவ்விருவரும் குணப்பெருங் கடலாக விளங்கிய மன்ன ஹுக்கேற்ற மாண்பின்றி மன்னெடு மாறு படுவாராயினர். அம் மாறுபாடு முதிர்ந்து மன்னனும் புதல்வரும் போருக்கெழுந்தனர். இதனேயறிந்த புலவர் புல்லாற்றூர் எயிற்றியஞர் இப்போர் எங்ஙனம் முடிவுறினும் தம் ஆருயிர் நண்பளுகிய மன்ன ஹுக்கே இழிவைத் தருவதாகும் என்பதை ஆராய்ந்துணர்ந்து, அரச ஹுக்குத் தக்க நீதிகளே எடுத்துரைத்துப் போரை யொழிக்க விரும்பி அரசண நோக்கி ஒரு செய்யுள் பாடினர். அச் செய்யுளில் புலவர் தம் கருத்தின் அரசனுக்குக் குறிப்பாகவும் வெளிப்படையாகவும் எடுத் துரைக்கும் அழகும், அரசனிடம் பேசும் முறையும் பெருஞ்சுவை பயப்பனவாக உள்ளன.

> '' மண்டம ரட்ட மதனுடை கோன்ருள் வெண்குடை விளக்கும் விறல் கெழுவேர்தே பொங்கு நீருடுத்த விம்மலர் த%வபுலகத்து கின்ற‰ வந்த விருவரை கினேப்பின் தொன்றுறை துப்பின் நின்பகை குருமல்லர் அமர்வெக் காட்சி மாறெதிர் பெழுந்தவர் கி*ணேயுங்*காலே கீயுமற்றவர்க்கு அணேபை யல்லே யடுமான் ரேன்றல் பரந்துபடு நல்லிசை பெய்தி மேற்றுநீ உயர்க்தோருலக மெய்திப் பின்னும் ஒழித்த தாயமவர்க் குரித்தன்றே அதனை், அன்னதாதலும் அறிவோய் கன்றும் இன்னும் கேண்மதி இசை வெய்யோயே கின்**ற துப்பொ**டு கிற்குறித் தெழுந்த எண்ணில் காட்சி இசோயோர் தோற்பின் ஙின்பெரு**ஞ் செ**ல்வம் யார்க் கெ**ஞ்**சுவையே அமர்வெஞ் செல்வ மீயவர்க் கு‰ேயின் இகழுநர் உவப்பப்பழி பெஞ்சுவையே அதனுல், ஒழிகதில் அத்தை நின்மறனே வல்கிரைந்து எழுமதி வாழ்கஙின் உள்ளம் அழிக்கோர்க் கேமமாகும் நின்தாள் நிழல் மயங்காது செய்தல் வேண்டுமால் நன்றே வாணேர் 119

அரும் பெறல் உலகத்**தான்**றவர் விதுப்புறு விருப்பொடு விருந்தெதிர் கொளற்கே''

என்பதா (புமாா ஹா ஹ 213) அச் செய்யுளாகும்.

அரசன் புலவர் பாற்போன்புடையளுபினும், பிற நட்பினரிடம் குறை கண்டபோது அக்குறை போக்கும் பொருட்டு அவர்பாலனுகி இடித்துரைத்தல் போல அரசனிடம் அணுகி இடித்துரைத்தல் கூடாது. அங்ஙனம் அனுகி இடித்துரைப்பின், அரசன் தன்னப் புலவர் அவமதித்தனர் எனக் கருதிவிடின், புலவர் பால் அரசனுக் குள்ள அன்பு குறைவதோடு அவனேத் திருத்த முயலும் அவர் எண்ண மும் நிறைவேறு தொழியும்.

> '' அகலாதணுகாது தீக்காய்வார் போல்க இகல் வேந்தர்ச் சேர்ந் தொழுகுவார் ''

என்பது தெய்வப் புலவர் மெய்ம் மொழியன்றே? அன்றியும் தன் மக்கள்பாற் போன்பு செலுத்து தற்குரிய மன்னன், அதற்கு மாருக அவர்கள்பாற் பெருஞ் சிற்றமுடையனுய்ப் போர் மேற்கொண்டிருக் கும் இர்கிலேயில், போரிற் சென்ற கருத்திறை புலவர் சொல்லேப் புறக்கணித்தலும் கூடும். இவற்றை என்குணர்ந்த புலவர் அரசன் சினம் தணிந்து தம் சொல்லில் கிணேவைச் செலுத்துமாறு அவணே யிடையிடையே புகழ்ந்து முன்னிலேப்படுத்திக்கொண்டே, தம் கருத்து அவன் உள்ளத்திற் பதியுமாறு சிறிது சிறிதாகவும், படிப்படியாகவும் வற்புறுத்திக் கூறியுள்ளனர்.

'' மண்டமர்வேக்கே ''

என்ற பகு தியில் வேக்கே! கீ போகிற் பகைவரைக் கொன்று வெற்றி பெற்றவன்; மிக்க வலிமையும் தளராத முயற்சியுமுடையவன்; குடிக னிடத்துக் கொண்ட அருளுக் கறிகுறியாகிய வெண் கொற்றக் குடையை யுடையவன்; எங்கும் பாக்த புகழை யுடையவன் என்றுர். இதன்கண் வீரமும் புகழுமுடையவன் என்றதலை, வீரமுடையார் தம் வீரத்தை உலகம் புகழ்தற்குரிய நன்னெறியிற் செலுத்து தல் வேண்டுமேயன்றி உலகம் பழித்தற்குரிய தீய கெறியிற் செலுத்தலா காது; இப்போது கீ மேற்கொண்டுள்ள போர் நின் புகழைக்குறைப்ப தாக உள்ளது என்பதைக் குறிப்பாலுணர் தினுர்.

'' பொங்கு கீர்அனே பையல் ஃ ''

என்ற பகுதியில் போர்புரியும் விருப்போடு நின்னெடு மாறுபட்டு வர்து கின் எதிரில் கிற்போர் கினக்குத் தொன்றுதொட்ட பகைவ ராகிய சேர பாண்டியரல்லர்; கீயும் அவர்க்குத் தொன்று தொட்ட பகையை யுடையையல்லே என்றுர். (தொன்றுறை துப்பின் பகைஞர் =தொன்று தொட்ட வலி பொருந்திய பகைவர் எனக் கொள்க.) இவ்வுலகத்து கின்குணப் பெருமையை யறிர்த எவரும் கின்னேடு போர் புரிய விரும்பார் என்பார். ''பொங்கு நீருடுத்த விம்மலர் த2ல யுலகத்து" என்றுர். அரசன் தன் புதல்வரைப் பகைவராகக் கரு திப் போருக்கெழுந்தமையால் அவரை 'நின்பு தல்வர்' என்றுல் அரச னுக்கு வெகுளி மிகுதல் கூடும் என்று கருதி '' நின்றலே வர்த இருவர்'' என்றுர். இச்செய்யுளில் புதல்வர், மக்கள் என யாண்டும் புலவர் கூறுமை கருதத்தக்கது. பண்டைக் காலத்துச் சோ பாண்டிய சோழ மன்னர்கள் அடிக்கடி ஒருவரோடொருவர் போர்புரிக்கு கொண் டிருந்தமையால் ஒருவர்க் கொருவர் பகைவராக விளங்கினர். அதனுல் சோழ மன்னனுக்கு ஏணேய சோ பாண்டியர் தொன்று தொட்ட பகைவோ் எனக் கூறப்பட்டனார்.

> '' இரும்பணே வெண்டோடு மலேக்கோனல்லன் கருஞ்சிணே வேம்பின் தெரியலோனல்லன் கின்ன கண்ணியும் ஆர்மிடைக்தன்றே கின்னெடு பொருவோன் கண்ணியும் ஆர்மிடைக்தன்றே ''

என்ற பகு தியால் (புறகானூற. 45.) சோழர்க்குச் சேர பாண்டியர் பழம் பகைவர் என்பது உணர்த்தப்படுதல் காண்க. (பணமால சேரர்க்குரியது; வேப்பமாலே பாண்டியர்க்குரியது; ஆத்திமால சோழர்க்குரியது. ஆர் = ஆத்தி.)

இங்ஙனம் மூவேக்கரும் அடிக்கடி போர்புரிக்து கொண்டிருக்கமை யால் ஒரோவழி இவர்கள் நட்புடையராய வழி, அதுகண்டு புலவர் பெருமுகிழ்வு கொண்டு '' நீவிர் இங்ஙனமே பிரியாது வாழ்வீராக'' என வாழ்த்துவாராயினர். ஒரு காலத்துச் சோழன் குராப்பள்ளித் துஞ்சிய பெருக் திருமாவளவனும், பாண்டியன் வெள்ளியம்பலத்துத் துஞ்சிய பெருவழு தியும் நட்புடையராய் ஒருங்கிருந்தனர். இச் சேராச் சேர்த்தியைக் கண்ட காவிரிப்பூம்பட்டினத்துக் காரிக் கண்ண ஞர் என்னும் புலவர் பெருமகிழ்வுற்று அவ்விருவரையும் நோக்கி ''உங்களுட் பிரிவை யுண்டுபண்ண முயல்பவர் சொல்லேக் கேளாது நீவிர் இருவிரும் இங்ஙனமே பலதேவனும் (பலராமன்) கண்ணபேரா னும் போலப் பிரியாது வாழ்வீராக'' என வாழ்த்திஞர்.

''அடுமான்ளேன்றல்'' பகைவரைக் கொல்லுக் திறன் வாய்க்க யாணயை யுடையவனே! என்றதலை் ''காம் தோற்றுவிடுவோம் எனப் புலவர் கருதினரோ'' என மன்னன் ஐயுருதிருத்தற்கும், போரிற் சென்ற கிணவாற் பராமுகம் காட்டாது தம் சொல்லேக் கூர்க்து கேட்டற்கும் மீண்டும் அரசீன வீரத்தாற் சிறப்பித்து முன்னிலேப் படுத்தினர்.

'' பரந்துபடு நல்லிசை.....அறிவோய் நன்றும்''

என்ற பகு தியால் கீ இவ்வுலகத்தில் அறத்தானும் வீரத்தானும் பெரும்புகழடைக்கு, இவ்வுலகை கீத்து கல்வினோயால் தேவருலகை யடைக்தபின் இச் சோழகாட்டாசு கின் மக்கட்கன்றே உரியது; அவர்கள் அறியாது கொண்ட பகைகமை காரணமாக கீ இப்போது அவர்களேக் கொன்றுவிட்டால் பின் கின் அரசை யார்க்களிப்பாய்? இதனே (யான் கூறவேண்டுவதில்லே) கீயும் கன்றுக அறிவை என்றுர். கமக்குப்பின் கம்மாசு கம் மக்கட்குரியது என்பதை யாமறியோமோ? இதனேப் புலவர் கூறி அறிவுறுத்து தல் வேண்டுமோ? என்று அரசன் கருதா திருத்தற்கு '' இதனே கீயும் கன்றுக அறிவை'' என்றுர். ('கன்றும்' என்பது 'அறிவோய்' என்புகனேடு கூட்டப்பட்டது.) இவ்வளவில் மன்னன் போர் கிறுத்துங் குறிப்பேனைகக் காணப் படாமையினுல் 'இன்னுங்கேன்' என மேலுங் கூறுவாராயினர்.

'' இன்னுங் கேண்மதி இசை வெய்யோயே ''

யான் கூற விரும்பிய கீதி இவ்வளவேயன்ற; இன்னும் உண்டு;

அதனேயும் கேள்; புகழை விரும்புவோனே! என்றுர். கொடியா ரைத் தக்கவாறு தண்டித்தல் அரசன் கடமை.

> '' கொலேயிற் கொடியாரை வேக்கொறுத்தல் பைங்கூழ் களேகட்டத@ேடு கேர் ''

என்பது தெய்வப்புலவர் வாய்மொழியன்றே? ஆதலின் நமக்குப் பின் இவ்வரசுக்கு இவர்கள் உரியர் என்பதற்காக, அறகெறி தவறித் தந்தை பென்றும் பாராது நம்முடன் போருக்கெழுந்த இவர்களேக் கொல்லாது விடுதல் தகாது என்று அரசன் கருதுதல் கூடுமாதலின், இவ்வளவேயன்று, இப்போரை பொழித்தல் வேண்டும் என்பதற்குத் தக்க காரணம் இன்னும் உண்டு, அதனேயும் கேள் என்றுர். இப்போர் நினக்குப் புகழ் தராது; இதனே நிறுத்துதலே புகழாகும், என்பதைக் குறிப்பாறுணர்த்துவராய் 'புகழை விரும்புவானே' என மீண்டும் விளித்தனர்.

'' நின்ற துப்பின்.....பழி எஞ்சுவையே''

இப்பகு தியில், நிஃபெற்ற வலிமையுடையராய் நின்னுடன் போருக்கு வந்த அறிவில்லாத நின்மக்கள் தோற்றுல் நின் அரசுரிமையை யார்க் களிப்பாய்? போரையே விரும்பும் செல்வமாகக் கொண்ட டீ அவர் கட்குத் தோற்றுல் நின் பகைவரெல்லாம் பெருமகிழ்ச்சி யடையும்படி பழியை இவ்வுலகத்து நிஃ நிறுத்துவாய் என்றுர்.

நின்மக்கள், எல்லாவகையானும் கிறந்த நின்னேடு போருக்கு வந்தமையால் எதனேயும் ஆராய்ந்தறியும் அறிவில்லாதவராயினும், வலிமையிற் குறைந்தவரல்லர், தளராத வலிமை யுடையவரே என்பார் '' நின்ற துப்பின் நிற்குறித் தெழுந்த, எண்ணில் காட்கி இளயோர்'' என்றுர். இதனைல் இப்போரில் நீ வெல்லுதல் ஒருதஃயன்று; அவர்கள் வெல்ல நீ தோற்றலுங் கூடும் என்பதை மக்கள் வலிமை கூறியதனைலும், இப்போருக்குக் கராணமான தவறு மக்கள்பாலதே என்பதை அவரறிவின்மை கூறியதனைலும் புலப்படுத்தினர். அரசண் நிச்சயமாகத் தோற்பான் எனத் தாம் கருதவில்லே என்பதை உணர்த் தற்கும், அரசண் பராமுகமின்றிக் கேட்டற்கும் மீண்டும் '' அமர்

வெஞ்செல்வ'' என விளித்தனர். ஈண்டு ''இகழுகர்'' என்றது சோ பாண்டியர்களே. அரசன் தோற்று முிந்தால், வென்ற புதல்வர் அடையும் மகிழ்ச்சியினும், 'சோழர் குடி பழிக்காளாயது' என்று கருதிப் பிற பகை மன்னர் அடையும் மகிழ்ச்சி பெரிதாகுமாதலின் மக்கள் மகிழ்ச்சியைக் கூறுது பிறபகை மன்னரடையும் மகிழ்ச்சியை எடுத்துரைத்தனர் புலவர். இங்ஙனமே மேற்காட்டிய ''இரும்பணே வெண்டோடு'' என்ற செய்யுளினிறு தியில் ''நும்மோரன்ன வேக் தர்க்கு, மெய்ம்மலியுவகை செய்யுமிவ்விகலே'' எனக்கோவூர் கிழாரும் கூறுதல் காண்க.

மக்கள் தோற்றுல் அரசனுக்குப்பின் அரசுக்குரியரில்லாது நாடு அல்லலடையும்; அரசன் தோற்றுல் அவனுக்குப் பெரும்பழி யுண் டாகும்; எனவே இப்போரில் வெல்லினும் தோற்பினும் அரசனுக்குத் தீமையன்றி நன்மை யுண்டாகாமையால் இப்போரை யவன் நிறுத்து தல் அவசியம் என்பதை விளக்கி வற்புறுத்தினர் புலவர். இவ்வள வில் மன்னன் போர் நிறுத்துங் குறிப்பினனுகக் காணப்பட்டமையால் 'இப்போரை யொழிக' வென வெளிப்படையாகக் கூறி மேலுஞ் சில கூறுவராயினர்.

'' அதனல், ஒழிகதில்.......கொளற்கே ''

என்ற பகுதியில், எவ்வாற்று தும் இப்போர் கினக்கு நன்மை தாராமை யால் இம்மறம் ஒழிவதாக; (மறம் என்றது ஈண்டுப் போரை) மிகவும் விரைந்து (நின் நகரத்திற்கு எழுவாயாக;) அஞ்சிவந்தோர்க்குப் பாதுகாவலாக உள்ள கினக்கு ஒரு தீங்கும் வாராமைக்கும், பின் தேவருலகில் அவர்கட்கு நீ சிறந்த விருந்தினனைவதற்கும் நல்வினேயைச் செய்க என்றுர். அவ்வளவில் போரும் நிறுத்தப்பட்டது என்பது பின் உள்ள செய்யுட்களால் உய்த்துணரப்படும்.

போர் செய்தற்கெழுந்த நின் ஊக்கம் போரை நிறுத்தி விடுத லால் அடங்கிவிடாது, மேலுலக இன்பம் பெறுதற் பொருட்டு நல் விணே செய்வதிற் செல்லுதல் வேண்டும் என்பதை ''வாழ்க நின் உள்ளம்" என்பதனுல் உணர்த்தினுர். (உள்ளம் = ஊக்கம். 'நின் தாள்கிழல்' என்றது நிணக்கு என்றபடி) 'அஞ்சி வக்தோர்க்குப் பாதுகாவலாகும் நீ' என்பது இப்போர் புலவர்கட்கு உயிராக விளங் கும் நினக்கு எதம் தரும் என யான் அஞ்சி, இதனே ஒழித்தற்கு நின்னே அடைந்துளேஞதலின், இப்போரை யொழித்தல் மூலம் எனக்கு நீ பாதுகாவலாதல் வேண்டும் என்னும் கருத்தைப் புலப்படுத்துகின்றது.

சோன் செங்குட்டுவன் வடநாடு சென்று கனகவிசயரை வென்று வந்தபின், சோழ பாண்டியர் தன்னே யிகழ்வாகக் கூறினர் என்பது கேட்டு அவர்கள்மேற் போருக்கெழுந்தனன். அப்பொழுது ஆண் டிருந்த மாடலன் என்பவன் '' இனிப் போர்க்தொழில் யொழித்து அறஞ் செய்தலில் நின் கருத்தைச் செலுத்து தல் நன்று '' என்றனன். அங்ஙனமே செங்குட்டுவனும் போரை நிறுத்தி அறஞ் செய்தலே மேற் கொண்டனன். இங்குப் புலவர் புல்லாற்றார் எயிற்றியனர் கோப்பெருஞ் சோழனுக்குப் ''போரை நிறுத்தி அறஞ் செய்க'' எனக் கூறியதும் மேல் செங்குட்டுவனுக்கு மாடலன் கூறியதும் ஒருவாற்று தெதிருத்தல் காண்க.

ஹான ரபிள் டாக்டர் ராஜா ஸர் அண்ணும**லேச் செட்டியாரவர்களின்** அறுபதாம் ஆண்டு கிறைவு விழாக் கொண்டாட்டத்தில்

வித்துவான் A. பூவராகம் பிள்ளே பாடிய

வாழ்த்துப்பாக்கள்.

சீசார் வணிகர் குலவிளக்காய்ச் செய்ய தமிழர் தவப்பயனும் ஏசார் அறத்தின் தனியுருவாய் இம்மாகிலத்தில் வக்து தித்துக் காசார் கொன்றைச் சடைப் பெருமான் கழல்கள் மலருக் திருவுளத்தோன் பாசோர் புகழண்ணும்லே மண்பண்பின் வாழ்க பல்லாண்டே. 1

நன்றே பென்றும் நிணேந்ததின நன்றே புரியும் அருந்திறலும் ஒன்றே கூறும் உளத்தெளிவும் உறுதிப்பாடும் தெளிந்தார்கண் சென்றே ஐயம் கொளாச் சிரும்செறிந்தோன் அண்ணும்லப் பெரியோன் இன்றே போலப் பன்னலமும் இயைந்து வாழ்க பல்லாண்டே.

கற்பார் விரும்பும் கஃயிண த்தும் கற்குமா பல்கஃக் கழகம் பொற்ப அமைத்தஃ தெஞ்ஞான்றும் பொலிர்து தோன்றப் பொருள் [கிறைத்தோன்

நற்பாலறிஞர் புலவருடன் நாடாள் மன்னர் புகழுங் குண வெற்பே கிகர் அண்ணும் வேள் வீளங்கி வாழ்க பல்லாண்டே. 3

பிறையார் கண்ணிமுடிப் பெருமான் பெருமன்றம்பொன்னணிக்து [துழாய்

நறையா**ர் கண்**ணி நாதனுறை நகரும் நன்கு திருத்தின்ணுல் முறையான் அறபாணண்டு நிறை முதல்வன் அ**ண்ணும்ஃ**க் குரிசில் குறையா ஒக்கல் நிறை செல்வம் கூடிவாழ்க பல்லாண்டே.

இன்பப் பாவாய் உரைவடிவாய் இறைவன் கோயிற்றிரு வுருவாய் நன்மைவளர் அண்ணுமஃப்பல் கழகமாகும் நல்லுருவாய் இன்னும் பலவாம் பேரறத்தின் எழிலாருருவாய் இயைந்தபுகழ் மன்னும் அண்று 10 கே 10 க்கேழ்ந்து வாழ்க பல்லாண்டே.

" புகழாய பொருளொடு ''

அண்ணுமஃப் பல்கஃக் கழகத் தமிழ் விரிவுரையாளர் திரு. அ. சிதம்பர**நாதச் செட்டியா**ர் (M. A.) அவர்கள் பாடியது.

பலதாடுசைக் கொச்சகக் கலிப்பா

புகழாய பொருனொடு புலமைசா னலத்தோடு தகவுகூர் திறமெய்தித் தணிவில்சீர்த் தாளாற்றி மகம்பல வாற்றியும் மாணறங்க ளாக்கியும் அகனமர்க் தளித்திட்டும் முகனமர்க் தியம்பியுஞ் செகமுள்ள திசையெல்லாஞ் செட்டிகாட் டிசைசெல்ல உகப்புடனே வாழ்தரும் உயாண்ணு மீலமன்னே!

(இது தாவு)

முன்னெருநாட் பாரிதான் முல்லேக்குத் தோளித்தான் இன்றெருநாட் போலவே எந்நாளுஞ் சோறளிக்கும் நின்வண்மை இருந்தவா தில்லேமூ வாயிரர்க்கே.

காவா திரவலர்க்குக் காரியென்பான் புரவிதக்தான் இரப்போர்கள் யாவருக்கும் எளிதிற் சோறளிக்கப் பரம்பரையாய்ச் சத்திரங்கள் பரவுதில்லே வைத்தணேயே.

ஆலமர் செல்வற்கே யருங்கலிங்கம் ஆயளித்தான் மேலவாக் தில்ஃயில் மேவிடுங் கூத்தன்மால் ஆயிரு பேர்க்கும்மே யறப்பணி வகுத்தணேயே.

அருெல்லிக் கனி தன்னே அதிகமான் கொடு ததிட்டான் தருகணேகள் பலபயிலுங்கழகத்தே புலவருக்கும் அருங்கலேகள் பயில்வார்க்கும் பலாயிரங்கள் தந்தனேயே, உள்ளிவரும் இரவலர்கட் குவந்தீந்தான் ஒருநள்ளி உள்ளாதே யிருப்போர்க்கும் உவந்தீயும் வேளண்ணுல் தள்ளாத மாணவர்க்குத் தனியுதவி செய்குவையே.

பேகணென்பான் பெருங்களுடன் பீலிக்குப் படாமளித்தான் ஆகவத்திற் கதிகபணம் அக்காள்போ லிக்காளும் ஆகுலமில் செட்டிகாட் டாராசே யளித்தணேயே.

ஆடுவார் மறந்தாரே பாடு தற்கே ஓரியிணப் பாடல்சொல் பள்ளியினிற் பற்பலவா மன்றுகளில் ஆடுகொள் நின்பெயர்தான் அடிக்கடியே சொல்லுவரே.

(இவை எழுக் தாழிசை)

எனவாங்கு,

கின் திறம் முற்றும் பாடு கர்க் கடங்கா அன்ணயாக் தமிழை யளிக்கும் வள்ளலே மன்னரும் விழைசீர் அண்ணு மஃயே தன்னருஞ் சீர்த்தித் துணேவி மக்களொடு பன்னெடுங் காலம் பாரினுள் வாழ்கவே.

(இது சுரிதகம்)

கல்வியும் க&லக்களமும்.

(Learning in the midst of Art)

[டி. கே. சிதம்பராாத முதலியார், டி.எ., டி.எல்.]

சரித்திர கஃவில் வல்லவரான டாக்டர் பந்தர்க்கர், கல்கத்தாவி லிருந்து இரண்டு வருஷத்துக்குமுன் வந்து, சென்னேப் பல்கஃக்கழகம் சார்பாக, ஆறு பிரசங்கங்கள் செய்தார். பிரசங்கங்களேச் சென்னேப் பல்கஃகழகத்தார் புஸ்தக ரூபமாக இப்போது வெளியிட்டிருக் கிறுர்கள்.

டாக்டர் பந்தர்க்கர் எடுத்துக்கொண்ட விஷயம் ''பூர்வ இந்தியா''. இந்த விஷயம் சம்பந்தமாக, பூர்வமான வடமொழி நூல்களே ஆராய்ந்து அருமையான சரித்திர உண்மைகளே வெளியிட்டார். எத்தணயோ மேற்கோள்களேக் கொண்டு அதிபூர்வமான நாகரிகம் ஒன்று தேசத்தில் இருந்து வந்ததென்றும் பிறகு ஆரியக்கொள்கைகள் வந்தன என்றும், பூர்வமான கொள்கைகளுக்கும், பிற்பாடு வந்த கொள்கைகளுக்கும் சச்சரவுகள் ஏற்பட்டுக் கடைசியாய் சமாசமாய்க் கலந்துகொண்டன என்றும் எடுத்துக்காட்டினர். இப்படி வகுத்தும் சேர்த்தும் பார்ப் பதில் எவ்வளவோ ரஸம். இதிலெல்லாம் ஆசிரியர் பந்தர்க்கர் எவ் வளவோ ஈடுபட்டுத் திளேத்தவர். சரித்திர உண்மைகளேத் தேடுவதி லும் காண்பதிலும் அவருக்கு, (எழுபது வயதுள்ள அவருக்கு,) யாருக் கும் இல்லாத ஆத்திரம்.

கடைசி நாளும் பிரசங்கம் முடிந்ததும், ஒரு விஷயத்தைச் சொல்ல இடம்கொடுக்க வேண்டும் என்று சபையோரைக் கேட்டுக்கொண்டார். அதாவது:

''தென் இக்தியா, (சரித்திர வல்லார் சொல்லுகிறபடி) அற் புதங்கள் கிறைக்த காடு. ஆணுல் அற்புதத்தில் அற்புதம் என்னவென்றுல் இந்த நாட்டின் பண்பாடு சம்பந்தமாக யாதொரு சரித்தொ வெளியீடும் இதுவரை வெளிவாவில்லே என்பதுதான்."

"People want to know something about Dravidian Culture. South India is a land of wonders; but the wonder of wonders is that the history of South India has not yet come out," (Hindu March 1, 1939)

இக்தப்படி ஆகிரியர் பக்தர்க்கர் சொல்லுவதற்குக் காரணம் எவ் வளவோ இருக்கிறது.

முதலாவதாகச் சொல்லவேண்டியது: நெடுகிலும் சென்னே யூனிவேர்சிடியார், சரித்திர பாடம் வகுத்ததும் அதைச் சொல்லிக் கொடுத்த முறையுர்தான். மாணவர்களுக்கும் ஆசிரியர்களுக்குமே அறியமுடியாத எட்டாத விஷயங்களேப் பற்றியே பாடம் பூமிக்குச் சம்பர்தமில்லாமல் ஆகாயத்தில் நக் த்திரங்களேப் போலத்தொங்குகிற விஷயங்களே எடுத்துக்கொண்டு போமாதப்படுத்துகிறது. உதாரண மாக ''கி. மு. 55-ல் ஜுலியஸ் ஸீஸர் குவாலேக் கைப்பற்றினர்''. இந்த வாக்கியத்தை நாலாவது பாரத்தில் படித்தேன் — இங்கிலீஷ் பாஷையில்தான் ஏதாவது எனக்கு விளங்கியிருக்கும் என்று நிணேக்கிறீர்களா? கி. மு. 55 என்முல் இன்னது என்று தெரியாது. ஜுலியஸ் ஸீஸர் யாரோ; 'குவால்' எங்கயோ; கைப்பற்றுதல் என்முல் அடுத்த பையன் பெண்களேக் கைப்பற்றுதல் போன்ற ஒருகாரியம் போலிருந்தது. இப்படித்தான் விஷையம் விளங்கியது.

எம். எ. வரைக்கும் படிக்கும் சரித்திர பாடம் எல்லாம் இந்தக் கணக்குக்குத்தான் வந்தது. ஏதோ ஒரு புஸ்தகத்தில், ஏதோ ஒரு விஷயத்தை, யாரோ ஒருவர் எழுதினர். அதை மனப்பாடம் பண்ணவேண்டியது; வருஷ ஆகயரில் அதைக் கடுதாசியில் எழுதிவிட வேண்டியது; ஆசிரியர்கள் அங்கீகரித்து, மார்க்கும் கொடுத்துவிட வேண்டியது; அவ்வளவுதான். இங்கிலாந்து தேசத்தின் பூர்வ சரித் திரம் தெரிந்துவிட்டதாக மாணவரும் ஆசிரியரும் எண்ணிக்கொள்ள வேண்டியது.

இதெல்லாம் சொம்பப் பரி தவிக்கவேண்டிய காரியமே. கொஞ்சம் யோசணே செய்தால், சரித்திரம் என்பது வார்த்தைகளால் ஆனதல்ல. உண்மைகளே மனதில் வாங்கி அனுபவிப்பது தான் என்று தெரியவரும். இது சம்பந்தமாக போசிரியர் பெர்ஞர்ட் ஷாவும், ஆக்ஸ் போர்டு யுனிவேர்ஸிடியையும் கேம்பிரிட்ஜ் யுனிவேர்ஸிடியையும் ரொம்ப ரொம்பக் கண்டித்துப் பேசுகிருர். அந்த யுனிவேர்ஸிடிகளில் கற்பதெல்லாம், புஸ்தகத்தை வைத்துத்தான். விஷயங்களே நேர்முக மாக வைத்தல்ல; அது காரணமாகக் கற்பனயாவும் பிரயோசன மற்றவை; ஆங்கில பாஷையே கெட்டுப்போய்விட்டது என்று பெரும் புகார் சொல்றுகிருர். இதை மறுத்துச் சொல்ல விபரம் தெரிந்தவர் கள் முன் வருவதில்லே.

ஆக்ஸ்போர்டு கேம்பிரிட்ஜிலுள்ளவர்கள் தமிழ் நாட்டு வளமையைப்பற்றி எவ்வளவு புஸ்தகம் படித்தாலும் ஒன்றுமே தெரிக்து கொள்ள முடியாது. அப்படியேதான் நாமும் எவ்வளவு புஸ்தகம் படித்தாலும் இங்கிலாக்தைப்பற்றி ஒன்றும் தெரிக்துகொள்ள முடியாது. ஆஞல், தமிழ்நாட்டிலுள்ள விஷயங்களே (புஸ்தகங்களே அல்ல) நேர்கோகக் கற்கலாம். ஆயுள் நாள் முழுதும் கற்பதற்கு விஷயங்கள் எத்தணயோ இருக்கின்றன. அவைகளேக் கற்கும்போதுதான் உண்மையான சரித்திர உணர்ச்சி இதயத்தில் பிறக்கிறது. அக்க உணர்ச்சி பிறப்பதனைலேயே, விஷயங்களில் ஈடுபாடும் உண்டாகிறது.

தமிழ் நாட்டில் சாதாரணமாக வெளிப்படையாகத் தெரிகிற காரியம்: கட்டிடங்களின் இரட்டைப் பாங்கு மதுரையிலுள்ள திருமலே நாயக்கன் மகால், தஞ்சாவூரிலுள்ள அரண்மணே. இந்தக் கட்டிடங்கள் பிற்காலத்தில் வடநாட்டுப் பாங்கை ஒட்டிக் கட்டியவை. இந்தப் பாங்கு அனேக வீட்டுகளுக்குள்ளும் புகுந்திருக்கப் பார்க்கலாம். இதை விட்டு வேறுக நிற்பது பூர்வமான நம்முடைய கோயில்களும், கோபுரங் களும். நமக்கிடையே கோயில்களும், கோபுரங்களும் உலகத்தில் எங்குமே இல்லாதபடி ஆயிரக் கணக்காய் நிமிர்ந்து நின்று, நம்மைப் பார்த்து, ''இங்கே வா சிற்பக் கலேயைச் சொல்லிக் கொடுக்கிறேன், சரித்திர உண்மைகளே எடுத்துக்காட்டுகிறேன்'' என்று ஒவ்வொன்றும் நம்மோடு பேசுகிறது.

கோயிலுக்குள் போவோமானல் அற்பு தமான ஓவியக்கலே விளங் கக் காணலாம். ஈடராஜ மூர்த்தியும் கோவிக்த ராஜரும் எவ்வளவு பெரிய விஷயங்களே அற்பு தமான ஓவிய உருவத்தில் விளக்கு கின்றனர்! எவ்வளவு புண்ணியம் செய்திருக்தால் இத்தகைய மூர்த்திகள் ஒரு காட்டாருக்குக் கிட்டும். நடராஜமூர்த்தியின் தக்துவத்தையும் கீஃயுருவத்தையும் ஒருங்கே அனுபவித்த பெரியார் கூறுவது: '' மனி தனுகப் பிறப்பது அவ்வளவு கல்ல காரியம் அல்ல; கான் எத்தணயோ துண்பங்களுக்கெல்லாம் உள் ளாக வேண்டித்தான் இருக்கிறது; ஆனுலும் தத்துவத்தையும் கீஃயின் அருமையையும் ஒருங்கே காணப்பெற்றுல் மனி ததைகப் பிறப்பதற்குப் போர்த்தணயே பண்ணவேண்டும்'' என்றுர்.

குனித்த புருவமும் கொவ்வைச்செவ் வாமிற்குமிண் சிரிப்பும் பனித்த சடையும் பவளம்போல் மேனியும் பால்வெண்ணீறும் இனித்தமுடைய எடுத்தபொற் பாதமும் காணப்பெற் ரூல் மனித்தப் பிறவியும் வேண்டுவ தேயிந்த மாநிலத்தே.

கோவிக்தராஜப் பெருமாளின் உருவத்தைத் தரிசித்தால், தியா னித்தால், ஆணவம் எல்லாம் கம்மைவிட்டுக் கழன்று கடவுளின் சலனமற்ற ஆனக்தத்தில் நாம் கலக்கலாம் என்பதைக் காட்டும். பேரமனே வழிபட்ட மூர்த்தியை, இக்ஷவாகு சக்கரவர்த்தி, நமக்குக் கொண்டுவக்து அருளினை என்று ஆவேசத்தோடு பேசுகிறுர் கம்பர்.

மலர்அயனே வழிபட்ட பணியரங்கப் பெரும்பாயலப் பரஞ்சுடரை யாம் காண அணியரங்கம் தந்தாணே அறியாதார் அறியாதார்!

சிற்பமும் ஒளியமும் இப்படி இருக்க, கோயிலுக்குள் பாடுகிற கவிகள் ஆயிரக்கணக்கான வருஷங்களாகப் பழுத்த தமிழ்க் கவிகள். இதை மாணிக்கவாசகர்,

தண்ணூர் தமிழ் அளிக்கும் தண்பாண்டி நாட்டானே என்று உள்ளம் உவர்து பேசுவார்.

அப்படியேதான் சங்கிகமும் பல்லாயிர வருஷங்களாகத் தமிழ் நாட்டிடையே வளர்க்து வக்த சங்கிதம். தமிழ்நாட்டுச் சங்கிதத்தை பிற தேசத்தார் ஒருவாறு கொண்டு போஞர்கள். ஆஞல் அப்படிக் கொண்டுபோனவைகளில் உயிரும் நட்பமும் அவ்வாறு இருக்க முடியா. ஏதோ ஒரு முறையில் மாறி பிரத்தியேகமான சங்கிதம் என்றுகூடச் சொல்லத் தோன்றும். தமிழ் நாட்டில் குடியேறிய என்ப நாட்டவரும் தமிழிசையைக் கற்றுக் கொஞ்சம் அவர்களுடைய தாய் பாஷையில் சாகித்தியம் செய்துகொண்டார்கள். தெலுங்கர் களும் கன்னடர்களும் இந்த விதமாக சாகித்தியம் செய்துகொண்டார் கள். வடமொழியிலும் செய்திருக்கிமுர்கள். இந்த இசைகளில் இசை இலக்கணம் நன்றுய் அமைந்திருக்கும். இலக்கண*த்தை* யாரும் க*ற்று*க் கொள்ளத்தானே ஐரோப்பியர்கள் கம்முடைய தமிழிசையைப் பற்றி எவ்வளவோ திருத்தமாக இலக்கணம் எழுதியிருக்கிறூர்கள். ஆணுல் அவர்களுக்குத் தமிழிசையின் தொன்மையான பண்பு கைவருமா? வராது. எப்படி மேல் நாட்டாருக்குத் தமிழின் இலக்கணம் விளங்குவ தாயும், தமிழிலக்கியப் பண்பு விளங்கமுடியாதபடியும் இருக்கிறதோ அப்படியேதான் தமிழிசையின் ஸ்தூலமான இலக்கணம் யாருக்கும் தெரியவரலாம். ஆனுல் தமிழிசையின் தொன்மையான (Classic quality) கைவருவது கஷ்டந்தான். தமிழ்ப் பதங்களில் தான் தமிழிசையின் தொன்மையான பண்பு அப்படியே அமைந்து கெடக்கிறது. பாவசங்கீதத்துக்கு உறைவிடமாயிருந்த ஸ்ரீமதி வீணே தனம்மாள் தமிழ்ப் பதங்களேப் பாடும்போது கேட்டுக்கொண்டிருந்தால் ஆயிரக்கணக்கான வருஷங்களாகப் பழுத்து வந்த தொன்மைப் பண்பு வாய்ர்த சங்கீதம் நம்முடைய செவி வழியாக இதயத்துக்குள் பாய்வ தாகவே தெரியவரும். தனம்மாள வீட்டிலுள்ளவர்கள் இப்போதும் அந்தவி தமாகப் பாடிக்கொண்டு தான் இருக்கிறுர்கள். சாகங்களி லுள்ள ஸ்தானங்கள் அவர்கள் பாடவில்தான் தெளிவாய்க் என்று இசைவல்லார் (அனேகமாக வயதானவர்கள்) சொல்லுகிருர்கள்.

மேலே சொன்ன இருவகைச் சங்கீதங்களேயும் ஒத்துப் பார்க்க வேணும் —ஒருபுறம் சாமான்யமாய் ஈடைபெறுகிற கீர்த்தனே வகை யைச் சேர்ந்த சங்கீதத்தையும், பக்கத்தில் தமிழ்ப் பதங்களேயும் வைத் துப் பாடிப் பார்த்தால் வித்தியாசம் நன்முய்த் தெரிந்துவிடும்.

இது சம்பந்தமாக ஒரு சங்கீத வித்வான் (நாகசா வித்வான்) சொன்னதை ஞாபகமூட்ட விரும்புகிறேன்.

'' நான் எழுபத்தைந்து வர்ணங்களே நன்றுய்க் கற்றிருக்கிறேன். தெலுங்குக் கீர்த்தனங்களே ஒரு நானேக்கு இரண்டு விழுக் காடு கற்றுத் திருப்திகரமாய் வாசிப்பேன். ஆகவே நூற் றுக் கணக்காகத் தெலுங்குக் கீர்த்தணேகளேக் கற்று வாசிக் கிறேன். ஆணல் தமிழ்ப்பதம் ஒன்றைக் கற்க முடிய வில்லே. அது அவ்வளவு உயர்ந்த பாணியில் அமைந்திருக் கிறது! என்னுடைய அனுபவம் போலத்தான் இதர சங்கே வித்துவான்கள் அனுபவமும்.'' என்று சொன்னூர். சொன்ன தற்குக் காரணம் என்ன? தொன்மைப் பண்பு (Classical quality) பாலையோடும் உணர்ச்சியோடும் சேர்முக மாக செடுகாள் கேட்டுவரவேண்டிய காரியம்.

இப்படியாக, பூர்வமான சங்கீதம், இடையிலே மாறபட்ட சங் கீதம்; பூர்வமான களி இடையே இலக்கண ஆசிரியர்களால் தமிழ்ப் பண்பு குன்றிய களி; நாட்டியத்திலும் பூர்வமானது இடையே வந்தது. ஒவியத்திலும் சிற்பத்திலும் காலத்தைக் குறிக்கக் கூடிய வேறபாடுகள், எத்தணே எத்தணேயோ தமிழ் நாட்டில் கண்ட கண்ட இடமெல்லாம் கிடக்கின்றன. ஒவ்வொரு துறையிலும் ஆராயவும் அனுபளிக்கவும், வேண்டிய மட்டும் விஷையம் இருக்கிறது. இந்த வகையாக ஆராய்ந்தால் டாக்டர் பந்தர்க்கர் சொல்லுகிறபடி தமிழ் நாட்டின் உண்மையான பண்பாட்டுச் சரித்திரம் வெளிவரலாம்.

மேலே சொன்ன கலேகள் போகத் தமிழர் வாழ்க்கையில் எத் தணயோ விஷயங்கள் கூர்க்து கவனித்து அனுபவிப்பதற்கே இருக் கின்றன. ஆகாரத்தின் தனித் தன்மை, உறவாடுவதின் தன்மை, கலியாணச் சடங்குகளின் தன்மை, கடவுள் வழிபாடுகள், காவடி, நடனம், புலவர்களே ஆதரித்தல், அனுபவித்தல், சமீபத்தில் இவைகள் சம்பக்தமான மாறபாடுகள் எல்லாவற்றையும் ஆராய்க்துகொண்டே இருக்கலாம்; ஒரு ஆயுள் போதாது.

இந்த விதமாக ஆராய்வதற்கு சென்னேப் பட்டணம் சரியான இடம் என்று சொல்ல முடியர்து. நாட்டுப்புறம் ஒட்டியதாய், தமிழ் பாட்டுக்கிடையே இருந்தால்தான் வசதி. அண்ணுமஃப் பல்கஃக் கழகம் வாய்ப்பான இடத்தில் அமைந்திருக்கிறது. ஆசிரி யர்களும் மாணவர்களும் மேலே சொன்ன கஃகளேயும் வாழ்க்கைப் பண் பாட்டையும் சேருக்கு நோகவே பார்த்து உணர்ச்சியோடு ஆராய்வதற்கு இப்போது முன் வருகிறுர்கள். சொம்ப சந்தோஷம்! சீக்கிரத்தில் இந்த முறை அமுலுக்கு வந்து விட்டால், நம்முடைய பண்பாட்டின் சரித்திரத்தைக் கற்பதற்கு, வட இந்தியாவில் மட்டும் இருந்தல்ல, மேஃய நாடுகளிலிருந்தும் நிபுணர்களே வருவார்கள். அண்ணுமஃப் பல்கஃக் கழகத்தின் புகழ் உலகெங்குமே தொனிக்கும்.

தேசிக விநாயகம் பிள்ளே பாடிய

வாழ்த்துப்பா

T

- அண்ணு மலேயாசே ஆழிசூ ழிவ்வுலகம் கண்ணூக் காணவருங் கற்பகமே—விண்ணேரும் நாடு மெழில் தில்லே நாயகனர் நல்லருளால் நேரே வாழ்க நிலத்து.
- தங்குமிடம் காணுது தத்தளித்து நின்றதமிழ் மங்கைதிரு வுள்ளம் மகிழ்ந்திடவே—பொங்கியமு மன்புகிறைக் தாதரிக்கும் அண்ணலே என்றென்றும் மன்புவியில் வாழ்க மகிழ்ந்து.
- பாரி கதை பாடிவர்த பாவலனுக் காயிரம்பொன் வாரி வழங்கியமா வள்ளலே—சீரிய செர்தமிழை ஈட்டுபெருஞ் செல்வக் களஞ்சியமாய்ச் சர்ததமும் வாழ்க தழைத்து.

H

- தில்ஃப் பதியுடையான் சிற்றம் பலம்தன்னில் அல்லும் பகலும்கின் ருடுகின்ருன்—எல்ஃக்கண் அண்ணு மஃமன் அமைத்த கஃக்கழகம் கண்ணுக் கண்டு களித்து.
- 2. சிருபரும் வணிகர்குலம் சிறக்கவர்தோன் தில்ஃவிலே கஃவளாக் கழகம் கண்டோன் பாரதான் தைடெங்கும் புகழ்விரித்தோன் பாடுமிசைத் தமிழ்வளரப் பண்ணே செய்தோன் மாரியென வழங்கியறம் வளர்க்குஞ் செல்வன் வள்ளலண்ணு மஃவயாசன் சுற்றத்தோடு வாரிதிசூ ழிவ்வுலகில் வாழ்க மாதோ! வளர்பிறைபோல் வளர்க்துநிதம் தழைகமாதோ!!

டாக்டர் : நாஜா : ஸர் : அண்ணும‰ச் செட்டியார் அவர்கள்மீது பாடிய

வாழ்த்துப்பா.

எழுச்ராசிரிய விருத்தம்

D. Devapiriam

எர் பெறு பாத காட்டினில் எங்கும் இலகுமுப் பானிலக் கம்பொன் நேர்பெறு கொடையிற் பெய்துபல் கணேசேர் நிணயமொன் ருருவனுத் தில்ணேச் சீர்பெறு நகரிற் றிகழ்தா வமைத்த செவ்விய தனிப்புகழ்ப் பெருமை பேர்பெறு மண்ணு மணேயெம தருமைப் பெருமதின் றனக்கலா லுளதோ?

கட்ட**காக்க**லிப்பா.

காம னன்னவன் கல்கியின் மாண்டுணேக் கழக நாட்டிப் புவிக்கறி வித்தவன்; பூமன் காரிணப் போன்றநல் வண்மையன், பொங்கு வான்புகழ் போர்த்தவன் பூந்தமிழ்த் தாமன் றண்செட்டி நாடு தழைப்பவன் தனிகன் நேயன்அண் ணுமஃயென்னு மெய்க் நாமன் றில்லே நடிப்பவன் றண்ணருள் நண்ணி வாழ்கவிம் கெண்ணில்பல் ஹாழியே.

கட்டணக்கலித்துறை.

கக்தா மணிவிளக் கேபெரு வைசிய சற்குடிக்கோர் சிக்தா மணியே செழுக்தேனு வேதிருத் தில்ஃயின்பால் எக்தாய் கழகமொன் றண்ண மஃமன்ன எம்பொருட்டாய்த் தக்தாய் எமைப்புரக் தாய்மட மென்னஞ் சழக்கொழித்தே.

வெண்புக்கள்.

கின்னுமத் தானீ கிறுவியவிம் மாண்கழக மன்னுகல் லண்ணு மஃவள்ளால் — எக்காளு காட்டுமுன தொப்பில் கயப்புகழை யிப்புவிக்குக் காட்டு மறிகுறித்தாண் காண்.

ஆதலால் அண்ணு மலேஙின் அருள்வாழி பூதலத்துன் மெய்ம்மைப் புகழ்வாழி — ஏதமிலுன் சீர்வாழி யுண்பொற் றிருக்கழகம் வாழியுன தூர்வாழி நாளு முயர்க்து.

கவிராஜ பண்டிதர், ஜெகவீர பாண்டியனர் இயற்றியவை

அறுசர் ஆசிரிய விருத்தம்.

கொண்டாட்டத்தின் தகுதி.

1. தருமலில் தழுவிவளர் தனவணிகர்
குலத்தினுயர் தவத்தில் வக்தே
அருமணியாய் ஒளிர்அண்ணு மலேயாசன்
அறுபதாண் டாண்டு கண்ட
பெருமைதனே உறவுரிமை யுடனெவரும்
உளமுவக்து பேணுகின்முர்
ஒருமையுடன் உதவினரை இருமையினும்
எவ்வுயிரும் உவக்குமன்றே.

கோடை வள்ளல்.

 செட்டி நாட் டாசனெனச் சீமையெங்கும் பேரோங்கச் சிறந்து நின்றுன் வெட்டி நாட் டாசாட்சி வேல்வலியால் கொண்டவர்கள் வெள்கி நிற்கப் *பட்டி நாட்டுயர்கல் வி பார்பரவச் செய்து தான் படைத்த செல்வம் கொட்டி நாட்டொருபெரிய கொடைவள்ளல் எனும் புகழ்மீக் கொண்டுவந்தான்.

520 f 20.

3. ஒருகாலும் மீங்காத உயர்கல்வி யில்ஃபெனின் உலகின் மக்கள் இருகாலின் மாக்களென இழிவுறவர் அவ்விழிவிங் கேரு வண்ணம்

^{*}பட்டி = க‰படில் கழகம்.

வருகால நிஃயமிக்து வகைதெரிக்து கஃயமிவை வளர்ப்போர் எல்லாம் அருகாலும் தருமணியா ஆருயிரின் பேரொளியரய் அமர்வாரன்றே.

கல்வி நல்கியுள்ள காட்சி

4. அன்னபெருஞ் சிறப்புடைய கல்வி தணே யாவருக்கும் அருள வேண்டி மன்னுபரஞ் சோ தியாய் மன்றிலொளிர் எம்பெருமான் மருவியுள்ள பொன்னகரின் அருகண்ணு மலேசுகரென் றெரு சுகரம் புதுக்கி யங்கே பன்னுபல கலேவளர் த்துப் பல்லோரும் இன்பமுறப் பணிசெய்துள்ளார்.

பல்லாண்டு வாழ்க

5. ஈவானே தெய்வமென இயலறிக்க புலவர்முனம் இசையுணர்க்து காவாசச் சொன்னமொழி கானில மெல்லாக் தெரிய கலமிகுக்து கோவாகி உயர் அண்ணு மலேயென் றும் குணமலேயாய்க் குலவி கின்று பாவாரும் கீர்த்தியுடன் பல்லாண்டு வாழ்கவெனப் பரவுவோமே.

சிவமயம்.

உருபு மயக்கம்

R. Kandaswamiar.

இக்காலத்து ஒரு சாரார் வேற்றுமைப் பொருண் மயக்கம், உருபு மயக்கமாகிய இவ்விரண்டனுள் உருபு மயக்கமாவது ஒரு வேற்றுமைக்கு சிய பல உருபுகளில் வைத்து ஒருருபு சென்று நின்ற நிலக்களத்து அவ்வேற்றுமைக்குரிய வேறுருபு சென்று நிற்றலாகுமெனக் கூறித் தங்கோணிறுவுதற்கு ''தூங்கு கையா னேற்கு நடைய'' என்னுர் தொடர் மொழிக்கண் ஒடு வருபு நிற்றற்குரிய நிலேக்களத்து ஆனுருபு சென்று நின்றமையின் உருபு மயக்கமெனக் கூறுகின்றனர். இப்பெரியார் கொள்கையின்படி உருபு மயக்கம் வேற்றுமை மயங்கியலிற் கூறிய குத்திரங்களின் ஒரு பகுதியினும் படாது வேற்றுமை யிலக்கணங் கூறிய சூத்திரங்களின் கண்ணே யடங்குவதை யாவருமறிவர். இவர் தங் கூற்றை நிறுவுதற்குத்தக்க சான்றுகள் கூறி நிலேபெறுத்துவாராயின் புலத்துறை முற்றிய நலத்தகையார் பலர்க்கும் நன்மை தருவ தொன்றுகும். அங்ஙனமின்றி எமது கருத்தென்று கோடு மென்பாராயின் யாமென் செய்யலாம். நிற்க,

இப்பெரியார் கொள்கையின்படி உருபு மயக்கமெனக் கொள்வோ மாயின் ஆகிரியர் தொல்காப்பியஞர் ஏழாம் வேற்றுமைக் கிலக்கணங் கூறிக் ''கண்கால் '' முதலியவாகப் பத்தொன்பான் வாய்பாடு பற்றிப் பொருளேவிரித்துக் கூறிஞர். அச்சொற்களெல்லாம் கண்ணென்வேற் அமை யுருபு நின்ற நிலேக்களத்துச்சென்று நிற்குமாயின் உருபு மயக்க மாவான் செல்லும். இச்சொற்களேயெல்லாம் ஆசிரியர் இளம்பூரணர் இவர் கொள்கைக் கேற்ப உருபெனவே கூறிப்போந்தனர். சொல்லதி காரத்திற்குரை கண்ட சேனுவரையர் உரையாகிரியர் கொள்கையின் படி உருபாயின் ''கண்ணென'' முன்னேதியவர் பின்னுங் கண்ணென வோதுவாயின் கூறியது கூறலாமாகலானும், ஏனேய வேற்றுமைகட்கு உருபும் பொருளும் கூறிய ஆசிரியர் ஏழாவதற்குப் பொருள் கூறுது உருபு கூறுவராயின் குன்றக் கூறலாமாகலானும் அப்பத்தொன்பதும் பொருளேயாமென்றனர். இவர் கூறியாங்கு அவைகளே யுருபெனக் கொண்டு இவைகள் கண்ணென்னுமுருபு நின்ற நிலிக்களத்துச் சேறல் உருபு மயக்கமெனக் கோடுமெனின் தனக்கினமான வேறுருபின்றிய ஐ, கு முதலிய வேற்றுமைகள் சென்று நிற்கும் நிலிக்களத்து இவ்வி எண்டற்கும் இனமாக உருபு வேறின்மையால் இவ்விரு வேற்றுமைக் கண்ணும் உருபு மயக்க மின்றுமெனப் பொருள்படும். படவே ''யாத ஹாருபிற் கூறிற்றுயினும் பொருள் சென் மருங்கின் வேற்றுமை சாரும்'' என்ற தொல்காப்பியனர் உருபு மயக்கத்திற்குக் கூறிய இலக்கணத்தோடு மாறுகொள்வதன்றி ''கிளையரிலாணற் கிழங்கு மணற் கீன்றமுன்'' எனவும் அலகிலற்புகக் கூத்துமையினேக் காட்டும் எனவும் '' இந்ககர்க்கே வாழ்கின்றேம்''' எனவும் ஆன்றேர் பல ருங்கூறிய உருபு மயக்கத்தோடு இகலுற்று நின்றமையுள் காண்க.

இனி இவர் கருத்தின் வண்ணம் கொள்வது உருபு மயக்கமாயின் வேற்றுமைகட் கோதிய இலக்கணச் சூத்திரங்களே அமையும். இவற்றை யொழித்து வேற்றுமை மயங்கியலேன ஒரோத்திற்குப் பெயர் கொடுத்துச் சூத்திரங்களுஞ் செய்தல் வீணுரவாரமே யன்றிச் சிறிதும் பயனின்று மென்றெழிக.

இவர் நுனித்தறிக்தோதிய உருபுமயக்க விலக்கணம் வேற்றுமை மயங்கியலிலுள்ள உருபு மயக்கச் சூத்திரத்தினும் பொருண் மயக்கச் சூத்திரத்தினு மடங்காமையின் வேறெம் மயக்கச் சூத்திரத்துளடங் குமோ யாமறியேம். இரண்டாவதற்கு ஐ என்னும் உருபை யன்றி இனமாக வேறருபின் றென்பது உலகறி பெற்றியேயாம்.

இனமுள்ளதும் இனமில்லதுமாகிய எல்லாவுருபும் மயங்கும் என நுனித்துணர்ந்தன்றே ''யாதனுருபிற் கூறிற்.....வேற்றுமை சாரும்'' என்ருர். இவர்கொள்ளும் மயக்க விலக்கணம் வேற்றுமை மயங்கியலுளடங்காமையின் அசம்பவ மென்னுங் குற்ற முடைத்தா தலுங் காண்க. இங்ஙனம் இம்மயக்கங்களே நணித்துணர்தல் அருமை யென்பது தோன்ற இலக்கணவிளக்க நூலார் '' அவ்விரு திறனுஞ் செவ்விதி ஞடி, இவ்வென வறிதலியல் புணர்க்தோரே'' ஏனக் கூறிய சூத்திரம் போற்றத்தக்கதாகும்.

ஆகிரியர் சேளையைர் இப்பத்தொன்பதும் ஏழாம் வேற்று மைப் பொருள் என்முர் என மேற்கூறிப் போக்காம். இவை யுருபாயின் ''ஊர்ப்புறத் திருக்கான்'' ''ஊரகத் திருக்கான்'' என மகர வீற்றிற்கு விதித்த அத்துச்சாரியை பெருவாகலின் உருபன்றெனவும், உருபல்லவேல் '' என்னுழை யிருக்கான்'', ''என்முன் சொன்னுன்'' முதலிய சொற்களில் கிஃமொழி யுருபூற் கோதியசெய்கை யேற்ற வாறென்னே யெனின் '' அதற் பொருட்டாகலின்'' எனவும் '' தம் முடைய தண்ணளியும்'' எனவும் கான்கனுருபும் ஆறனுருபுமாகிய இவ்விரண்டன் பொருள்படப், பொருட்டு என்பதும், உடைய என் பதும் வக்து கிஃ மொழிச் செய்கை யேற்று கிற்றல் போல ஏழாவதன் பொருள்படவக்த '' உழை, முன்'' னென்பன கிஃமொழிச் செய்கை யேற்று கிற்றல் போல ஏழாவதன் பொருள்படவக்த '' உழை, முன்'' னென்பன கிஃமொழிச் செய்கை யேற்று என்க; இவையெல்லாம் உருபன்று என்க; இவையெல்லாம் உருபன்று என்க; இவையெல்லாம் உருபன்று என்க;

இவ்வாறு உருபின் பொருள்பட வருஞ் சொற்கள் பலவாகும். அவை வருமாறு: ஆல், ஆன், பொருட்டு, கிமித்தம், காட்டிலும், பார்க்கிலும், அ முதலியணவாகும். இவற்றைப் பிற்காலத்துள்ள நூலாகிரியரெல்லாம் உருபெனவும், சொல்லுருபெனவும் கொண்டு நூல் செய்வாராயினரென்க. ஆகிரியர் தொல்காப்பியனர் விதல்தோ திய வுருபுகளன்றி யேணேயவெல்லாம் உருபின் பொருள்பட வக்த சொல்லேயாம். உருபன்றென்பது தொல்காப்பியராணேயின் நூலுணர்க்தோர் கொள்கையாமென்க. இவையெல்லாம் உருபின் பொருள் பட வக்தன வென்பதற் கிலக்கணம் யாண்டுப் பெறுதுமெனின் கூறுதும்: ஆகிரியர் தொல்காப்பியனர் மூன்றும் வேற்றுமைக் கிலக்கணம் கூறிப் பொருளுணர்த்து மிடத்து '' இன், ஆன், ஏது '' என வும், நாண்காம் வேற்றுமைக் கிலக்கணம் கூறிப் பொருளுணர்த்து மிடத்து '' அதற் பொருட்டாதலின் '' எனவும், ஆறும் வேற்றுமைக் கிலக்கணன் கூறிப் பொருளுணர்த்து மிடத்து '' உடைமையின் '' எனவும், இரண்டாவதற்கும் கான்காவதற்கும் திரிபோதும் வழி உரு எனவும், இரண்டாவதற்கும் கான்காவதற்கும் திரிபோதும் வழி உரு

பின் பொருள்பட வக்த ''ஆன்'' என்னும் சொல்ஃயும் உருபாக வுபசரித்து '' ஐ ஆன்குச் செய்யுட் கவ்வுமாகும், ஆகா வஃறிணேக் கானல்லாதன" எனவும் உடம்பொடு புணர்த்தி இலக்கண மோதினமையின் இலக்கணமாம்; ஆதலின் இன்ருதல் யாண்டைய தென்க. இவையெல்லாம் உருபன்று. உருபின் பொருள்பட வக்த சொல்லாதல் தெளிவா மென்க.

இனி ''யாணேயைக் கோட்டைக் குறைத்தான்'' என்னுக் தொடர்மொழிக்கண் வரும் ஐயுருபோண்டணயும் உருபுமயக்க மெனவும் ''கிழங்கு மணற் கீன்ற'' வென்புழி வரும் நான்காம் வேற்றுமையிணயும் உருபுமயக்க மெனவும் கொள்ளும் கீவிர் '' தூங்கு கையானேங்கு நடைய ''' என்புழி வரும் ஒடுவையும், ஆணயும் உருபு மயக்கமெனக் கொண்டால் வரும் இழுக்கென்னேயெனின் சண்டு ''யாணையைக் கோட்டைக் குறைத்தான்'' என்புழி மயக்கமாவது உருபேற்ற சொல்லும் உருபு கோக்கிய சொல்லும் பொருட் பொருத்த முறத் தம்முள் இயையாமையின் மயக்கமாதலின்றும்; இரண்டுருபும் ஒரு பொருட்கண் அடுக்கி வர்தமையின் மயக்கமாயினவென்க. ''கிழங்கு மணற் கீன்ற'' வென்புழி நான்காவதன் பொருளான் அவ்வுரு பேற்ற சொல்லும் உருபு கோக்கிய சொல்லும் தம்முளியை யாமையின் அவற்றையியைக்கும் ஏழாவதன் பொருட்டாயினவாற் ருன் மயக்கமாமாறு கண்டுகொள்க. ''தூங்கு கையான்'' என்புழி உருபடுக்கிவரின் உருபு மயக்கமெனக் கோடும். அங்ஙனமன்றி ஒடு கிற்றற்குரிய விடத்தில் ஆஹருபு கின்று கிஃமொழியோடு வருமொழி பொருட் பொருத்தமில்லது போலத் தோன்றினும் அவற்றை யியைத்தற்கு வேருரு வேற்றுமைப் பொருளன்றி அவ்வேற்றுமைப் பொருளே வருதலின் உருபு மயக்கத்தின்பாற் படாதிழுக்காதலறிக. ஒடுவும் ஆனும் இரண்டு வேற்றுமையாக வைத்து மயக்கங் கூற லாகாதோவெனின் ''வேற்றுமை மயக்கமாவது ஒரு வேற்றுமையது ஒரு பொருட் கண்ணுக, சில பொருட் கண்ணுக ஏணேய வேற்றுமை யுஞ் சேறலன்றே ' அவ்வாறன்றிச் செறிதொழித்து எல்லாப் பொருட் கண்ணும் இரண்டு உருபும் சேறலானும், வடநூலுள் பொருள் வே*ற்று*மை பல்லது உருபு வேற்றுமையான் ஒரு வேற்றுமையா**க** ஓதப்படாமையானும் ஈண்டு எல்லா வாசிரியரும் (ஒடு, ஆன் இரண் டணேயும்) ஒரு வேற்றமையாகவே ஓதினரையானும் இரண்டெனக்

கோடல் பொருத்தமில் கூற்று'' மென்று மூன்றும் வேற்றுமைச் சூத்திரவுரையில் சேனுவரையர் கூறியவாற்றுணுணர்க.

ஆகிரியர் சேனைவை பர் வேற்றுமை மயங்கியல் முதற் சூத்திர வுரையில், உருவு மயக்கமாவது தன் பொருளிற்றீர்க்து பிறிதொன்றன் பொருட்கட் சேறலெனவும், பொருண்மயக்கமாவது தன்பொருளிற்றீ ராது பிறிதொன்றன் பொருட்கட் சேறலெனவுங் கூறி ''யாதனு ருபின்'' என்பதனைல் உருபுமயக்க முணர்த்திரை; அல்லனவற்று னெல்லாம் பொருண் மயக்க முணர்த்தினு செனவும் வரைக்தனர். ''யாதனுருபின்'' எனனுஞ் சூத்திரத்து உருபு மயக்கமாவது உருபு ரோக்கிய சொல்லும் உருபையேற்றசொல்லும் தம்முட் பொருட் பொருத்தமுறத் தழுவாது நிற்கும் என்றும், பொருண் மயக்கமாவது உருபேற்ற சொல்லும் உருபுகோக்கிய சொல்லும் பொருட்பொருத்த முற உருபு விரிக்தாயினும் தொக்காயினும் நிற்கப் பிறவேற்றுமைப் பொருள்கள் வக்து மயங்குமென்றும் பொருள்பட வரைக்கிருத்தல் காண்க.

இங்ஙனம் வருதலே பொருண் மயக்கமுமாமென்பதனேப் பிர யோக விவேகநூலாரும், 'தன் பொருளிற்றீராது பிறிதொன்றன் பொருட்கட்சென்று உருபேற்றசொல்லும் உருபு கோக்கிய சொல்லும் சிறு பான்மை தம்முளியை புடைத்தாதல்' என்று கூறியவாற்று துணர்க. உருபு மயக்கத்திற்கு எணேய உரையாசிரியர் காட்டிய உதாரணங்களேயே காட்டியிருத்தலின் வரையாது விடுத்தாம்.

இங்குப் பொருண் மயக்கத் திற்கும் உருபு மயக்கத் திற்கும் கூறிய இலக்கணங்களேக் கொண்டு, ''முதன் முன்னேவரின்'' என்னுஞ் சூத் திரவுரையில் நச்சிரைக்கினியர் இவ்விரு மயக்கத் திற்குங் காட்டிய உதாரணங்களே நோக்கின் நன்கு புலரைம். அவை வருமாறு. ''யாணே பைக் கோட்டின்கண் குறைத்தான்'' பொருண் மயக்கம். ''யாணே பைக் கோட்டைக் குறைத்தான்'', ''மணியை நிறத்தைக் கெடுத் தான்'' ஒரு தொடரின் இரண்டுருபு மயங்களின் உருபு மயக்கம். ''மணியை நிறத் தின்கண் கெடுத்தான்'', ''தீஸமகணேச் செலவின்கண் அழுங்கு வித்தல்'' இவை பொருண் மயக்கம். ''தீஸ மகனது செலவை அழுங்கு வித்தல்'' இவை பொருண் மயக்கம். ''தீஸ மகனது செலவை தனே நூலே ஒதுவித்தான்,'' '' பாற்றை ரீரை விலக்கிஞன் '' இவை உருபுமயக்கம்.

இனி இலக்கண விளக்க நூலாசிரியர் ''பொருண் மயங்கு தலும் உருபு மயங்கு தலும் தெரிநிலேயுடைய வேற்றுமைக்கண்ணே" எனவும் '' அவற்றுள், பொருளின் மயக்கம் பிறிதொன்றன்பொருளொடு, தன் பொருள் விடாது தஃமயங்குதலே" எனவும் ''உருபின் மயக்கம் ஒருருபின் பொருளொடு, தன் பொருள் விடுத்துத் தஃ மயங்கு தலே'' எனவும் ''அவ்விரு திறனுஞ் செவ்விதிரைடி, இவ்வெனவறிதலியல் புணர்க்தோபே'' எனவுங் கூறலான் யாம் கூறியதே பொருக்துமாறு காண்க. இவ்வாசிரியர் இப்பொருண் மயக்கம் உருபுதொக்கு மயங்கு வனவும் உருபு விரிந்து மயங்குவனவும் உளவென்றுர். இதனே த் 'தொக் குழி மயங்கு ஈ' என்ற நன்னூ ற் சூத்தி சத்தானு முணர்க. விரிர்து மயங்கு வன மேற்கூறிய உதாரணங்களானுமுணர்க. இங்குக்காட்டிய இறுதிச் சூத்திரத்தின் உரையின்கண் இவ்விருவகை மயக்கமும் செவ்வனே வரைந்துள்ளனர். ஆண்டுக்காண்க. இலக்கணக்கொத்து நூலாரும், சின் ஹாலாகிய நேமிநா*தத்தாரு*ம் இங்ஙனமே கூறியிருப்பதையும் அ**ர்** நூலானும் உரையானும் நன்கறிக்து தெளிக. உருபு மயக்கத்தைப் பற்றி முன்னர்க் கூறிய ஒரு சாரார் கருத்து இவ்விலக்கண நூல்க ளொன்*றினு*ம் வாசாமையான் ஐயுற*த் த*க்கதேயாம்.

வாழ்த்துரை.

(Pandithamani, M. Kathiresa Chettiar)

பெருமை மிக்க ராஜா ஸர் அண்ணும‰ச் செட்டியார் அவர்களின் அறுபதாம் ஆண்டு நிறைவு விழா நடைபெற இருப்பது தெரிந்து அள விலா மகிழ்ச்சி படைகின்றேன். கனம் ராஜா ஸர் அவர்கள் வாணிகத் துறையில் கிகரற்ற திறமை படைத்தவர்கள்; பொருளீட்டற்குரிய வினே த்திறங்களேப் பகுத்துணர்வதிலும், அவ்வுணர்வைச் செயன் முறைகளில் பயன்படுத்துவதிலும், அங்ஙனம் நெறியறிக்தீட்டிய பொருளே உலகத்திற்குக் காலம் அறிக்து ஒப்புரவறங்களேச் செய்வதி **லு**ம் தமக்கு ஒப்பாக எவரையுங் கூறமுடியாத நிஃயில் சி*ற*ப்புப் பெற்று விளங்குபவர்கள் ; இன்னோன்ன செயற்கருஞ் செயல்களால் இவர்களுடைய புகழ் இந்நிலவுலகமுமுதும் பாந்து ஒளி தாயிற்று. திருவுடையார் அறிவுடையராதலும், அறிவுடையார் திருவுடையராதலும் எளிதில் அமைவனவாகா. நம் ராஜா அவர்கள் திருவும் அறிவும் ஒருங்கே வாய்க்கப் பெற்றவர்கள். அறிவுடையார் குழுவில் திறம்படப்பேசும் சொல்வன்மையும், எச்செயஃவயும் வரை **ப**றத்துக் காலம் கடவாமல் கிறைவேற்றும் மதிவலியும், கி*ரு*வாக முறையில் போற்றலும் நன்கு படைத்தவர்கள். ஈட்டிய பொருளே வழியறிர்து அறஞ்செய்து புகழ் வளர்க்கும் பெருமை இவர்களுக்கே யுரியது. அண்ணும்லப் பல்கலேக் கழகம் இவர்களுடைய சிறந்த புகமுருவமாக அமைந்ததொன்று. இப் பல்கலேக் கழகத்தில் எல்லாக் கலேகளும் வளர்ச்சி அடைகின்றன. சிறப்பாக இயற்றமிழும், இசைத் தமிழும் திருர்திய முறையில் வளம் பெற்று வளர்கின்றன. ாஜா அவர்களின் நன்கொடை பெற்ற அற நிலேயங்கள் உலகத்தில் மிகப் பலவாம்.

நாட்டுக்கோட்டை நகரத்துத் தண வைசிய மரபு இவர்கள் அடைந்து வரும் பதவிகளால் பெரிதும் விளக்கமூற்றுத் திகழ்கின்றது. இவர்கள் குடிப்பிறப்பால் இளேயாற்றங் குடிக்கோயிலில் பட்டினச் சாமியார் வகுப்பைச் சார்ந்தவர்கள். குலமுதல்வரோ சிவஞானப்

பெருஞ்செல்வராக விளங்கிய பட்டினத்து அடிகளே ஆவர். இதனுல் குலத்தாலும், நலத்தாலும், குணத்தாலும், புகழாலும், குறையா ஞான பலத்தாலும் உயர்க்தவர்கள் கம் அரசர் பெருக்தகையாராவர். களுடைய செயற்கருஞ் செயல்களேயும், பலவகை ஆற்றல்களேயும், மதிவலியையும் அளர்துரைத்தல் அரிதாகும். இந்தியாவிலும் ஏனேய நாடுகளிலும் இவர்கள் பெயர் கல்லெழுத்துப்போல அறிவுடையார் உள்ளத்தில் பதிந்து விளக்கமுறுவது எனின், அது பிகையாகாது. எத்துணேயோ அரிய வேலேகளுக்கு இடையில் மறப்பு என்பது செறி தைம் இன்றிச் சிறிய காரியங்களேயும் நிணவு கூர்க்து செய்து முடிக்கும் கிணவாற்றல் இவர்களிடத்து அமைந்திருத்தல்போலப் பிறர் இடத்துக் காண்டல் அரிதாகும். கற்றவர்களே என்கு அறிர்து சிறப்பியற்றும் இவர்களது உயர்குணம் மிகவும் பாராட்டத்தக்கது. மாட்சிமை மிக்க இந்திய சக்கரவர்த் தி அவர்களாலும், பல்கஃக் கேழகங்களாலும் இவர் கள் முறையே அடைந்து வந்த பட்டங்கள் மிகப் பலவாம். இது வரை கிடைத்த பட்டங்களேவிட இன்னும் உயரிய பட்டங்கள் இருக்குமாயினும் அவற்றிற்கும் இவர்களே பெரும் தகுதி வாய்ந்த வர்களென்பது உலகம் அறிர்த தொன்று.

பூர்வ புண்ணிய விசேடத்தால் சிறந்த அறிவும், கல்வியும், நற்குணங்களும் வாய்க்கப்பெற்ற குமார ராஜா. ஸர். முத்தையா செட்டியார் முதலிய புதல்வர் மணிகளே உடையவர்கள். இவ்வரசர் பெருந்தகையார்க்கு அணிமையில் கடைபெற விருக்கும் அறுபதாம் ஆண்டு நிறைவு விழா உலக விழுவிக்க் கொண்டாடத்தக்க தொன்று.

இன்னும் இவர்கள் வாழையடி வாழையாகக் கிளேயொடு சுற்றக் தழைக்க இக்கில வுலகத்தில் பல்லாண்டு பல்லாண்டு வாழ்க்து மக் களுக்கு நலம் புரியவும் இங்ஙனமே எண்பதாம் ஆண்டு வை விழாவும் இவர்களுக்கு நிகழக்கண்டு இவ்வுலகம் இன்புறவும் இறைவன் திரு வருள் பாலிக்க வேண்டுகின்றேன்.

வாழ்த்துப் பாக்கள்

இசைத்தமிழ்ச் செல்வர் தி. லக்ஷ்மண பிள்வோ.

- பாவேக்தர் போற்றுகின்ற பைக்தமிழைப் போற்று தற்காய் மூவேக்தர் முன்னை முணக்தெழுக்தார்—காவேக்கிப் பண்ணர் தமிழ்ப்பாப் பயிர் வளர்க்க இன்றெழுக்தார் அண்ண மலேயா மாசு.
- வெள்ளேக் கமலத்தில் வீற்றிருப்பாள் ஈம் இசையோ டுள்ளக் கமலத்தில் உற்றிருக்க—மெள்ள மூணேர் தண்ணுமூலக் கழகம் அன்பிற் செயல்புரியும் பண்ணுளர் போற்றப் பரிர்து.
- 3. அன்பே யமைகின்ற அண்ணுமஃ வேர்தர் மன்பே ரறத்தின் மகிமையெலாம்—பொன்போலக் காட்டினர் செல்வர்க்குக் கல்விக் கழகத்தில் நாட்டினர் கீங்கா ரலம்.

உய்ர்திருவாளர், இராசா சர் அண்ணுமலே செட்டியார் அவர்களே

வாழ்த்தியது.

ச. முத்துக்குமர சுவாமி (வித். 3-ஆம் ஆண்டு)

நேரிசை வெண்பா

- அண்ணு மலேமன்ன ஞற்று முதவிதின எண்ணினு லெண்ணரிய எண்ணிஞல்—மண்ணில் முக் கண்ணிஞன் காத்த கருவுயிர்க ளத்தினையும் எண்ணுவதோ டொக்கு மிது.
- திட்டமுட னேவகுத்த சட்டிபூர்த் தித்தினத்தில் மட்டவிழ் கோதையர்கள் மங்கலமாய்—இட்டமுடன் பண்டைத் தமிழ்பாடப் பண்புடனே கேட்டுமீ எண்டிக்கு மேத்த விரு.
- பண்ணர் தமிழ்தனேயும் பற்பன் மொழிகளேயும் மண்ணேர்கள் கற்பதற்கு மாண்புடனே— எண்ணிய அண்ணு மலேமன்ன அன்புடனே யெக்காளும் புண்ணியணேப் போற்றிவாழ் வாய்.

விஞ்ஞான விரர்

(டி. பு. நவேநீத கிருஷ்ணன் M.A., பௌதிக தால் பிரிவுரையாளர், அண்ணுமேஃலக்கர்)

விஞ்ஞான முன்னேற்றத்தையே பெரிதாய்க்கருதி தம் உயிரை யும் தொணமாய் எண்ணி பலவகை இன்னல்களுக்குட்படினும் மனக் தொண்டாற்றின விஞ்ஞானிகள் பலர் ஆவார். கதிர்கள் (X-rays) முதன் முதலில் ராண்ட்ஜன் (Rontgen) என்ற விஞ்ஞானியால் கண்டுபிடிக்கப்பட்டன. அதன் தண்மைகளேப்பற்றிப் பல விஞ்ஞானிகள் ஆராய்ச்சிகள் செய்யலாயினர். அக்கதிர்கள் அதிக மாய்ப் படுவதால் உடலின் தோலும் தசையும் மிகவும் பாதிக்கப் பட்டுப் புண்கள் உண்டாகின்றன. பல ஆண்டுகளுக்குப் பின்னரே, ரப்பராலும் ஈயத்தாலுமான கவசங்கீனப் பூணுவதால், இப்புண்கள் ஏற்படாதவாறு தடுக்கலாம் என்று கண்டுபிடிக்கப்பட்டது. அதுவரை புதிர்க்கதிர் புண்ணுல் பீடிக்கப்பட்டும், விஞ்ஞானத் தொண்டே தம் கடமைபெனக்கரு தி புதிர்க்கதிராராய்ச்சியில் பல விஞ்ஞானிகள் ஈடு பட்டனர். இவ்வாறுனவரில், களாரன்ஸ் டாலி (Clarence Dally) என்பாரும் ஒருவர். அவரது இரு கைகளும் சூட்டுப் புண் போன்ற புண்களால் பீடிக்கப்பட்டன. அவாது தலேமயிரும் முக மயிரும் உதிர்ந்துவிட்டன. இடதுகையில் புற்றுப் புண் மூண்டது. பின் வலது கையும் பா திக்கப்பட்டது. புண் மருத்துவ சிகிச்சைகள் யாவும் பயனற்ற வையாயின. முதலில் இடது கைபையும் பின்னர் வலது கையையும் வெட்டியெடுத்து விட வேண்டியதாயிற்று. ஆயினும் செயற்கைக் கைகளி **னு தவி கொண்டு, அவர் தம்** பணியாற்றி வர்தார். ஏழாண்டுகளாய் இவ் வாறுன நாகவே தணே அனுபவித்த பின், இறு தியில் கூற்றுவன் இவர் மீது இரக்கங்கொண்டு விடு தலே யளித்தான். புதிர்க்கதிர்களேப்பற்றின ஆராய்ச்சியில் ஈடுபட்டு இவ்வாறு வேதணேப்பட்டவர் பலர். இக்காலத் தில் இவ்வா*ருன தூன்*பத்திற்குட்படாது பணியாற்*று*தற் கேற்ற புதிர்க் கதிர்க்கருவிகள் கண்டுபிடிக்கப்பட்டுள்ளன. ஆகலின், இனி இத்துறையில் பணியாற்றும் விஞ்ஞானிகள் வேதணப்படவும் உயிர் து றக்கவும் கோ.

மணேக்காய்ச்சுவின் (Malaria) காரணத்தையும் அதற்கான சிகிச்சை முறையையும் பற்றி ஸர் சோஞல்ட் சாஸ் (Sir Ronald Ross) என்ற மருத்துவ அறிஞர் ஆராய்ர்து வர்தார். அக்காய்ச்சல் வராதவாறு தடுப்பதற்கான வழிகளே அவர்கண்டுபிடிக்க எண்ணினர். கொயினு சார்து (Plasmoquine) என்ற மருர்தை உண்பதால் அக் காய்ச்சல் வராதிருக்கும் என்று கண்டுபிடித்தார். அம்மருந்தைப் பற்றிய சோதணேக் குட்பட பதிணைக்குபேர் இசைந்தனர். மூவர் மருந்துண்ணு திருந்தனர். எணயவர் மருந்தை அருந்தினர். அதன்பின் ம‰க்காய்ச்சலுக்குக் காரணமான கொசுக்கடிக்கு எல்லோரும் உ*ட்* படுத்தப்பட்டனர். மருந்துண்டவர் காய்ச்சலால் பீடிக்கப்படாது *மருந்துண்ணு தவ*ர் ப தினைக்கு நாட்களுக்குப்பின் கப்பினர். காய்ச்சலால் பீடிக்கப்பட்டனர். இங்ஙனம் விஞ்ஞான முன்னேற்றத் திற்கென*த்* துணிவுடன் **கா**ய்ச்சலின் வாய்ப்படு*தற்*கு முன்வந்**தவர்** இலட்சிய வீசரே யன்றோ?

மஞ்சள் காய்ச்சல் (Yellow Fever) என்ற மற்றொரு கொடிய கோயைத்தடுக்கும் ஆராய்ச்சிகளிலும், இவ்வாறே ஐவர் சோதனேக்குட் பட முன்வந்தனர். ஆணைல், அவ்வமயம், மருந்து பயனற்றதாயிற்று. ஐவரில் இருவர் கோய் வாய்ப்பட்டு இறந்தனர். இவர் லாஸியர் (Lazear) என்ற பெயர் பெற்ற அமெரிக்க நாட்டு மருத்துவரும், க்ளாரா மாஸ் (Clara Maas) என்ற தாதியுமாவர். போகிரியர் ஆட்ரியன் ஸ்டோக்ஸ் (Professor Adrian Stokes) என்பாரும் இந் கோயைப்பற்றின ஆராய்ச்சியில் ஆப்பிரிக்காவில் ஈடுபட்டிருந்த காலத்தே அந்நோயால் பீடிக்கப்பட்டு உயிர்துறந்தார்.

புற்றுப் புண்ணே (Cancer)ப் பற்றிய ஆராய்ச்சிகளிலீடுபட்ட பலர், அப்புண்ணே வலியப்பெற்றுக்கொண்டனர். அவர்கள் இன்னு சென்பதை இன்றும் நாமறியோம். யாருமறியாத இவ்வீசசே விஞ் ஞானத்தின் சிறந்த வீசர் என்பதில் ஐயமில்லே.

குஷ்டரோக நிவாரணத்திற்கான முறைகளேப் பற்றின ஆராய்ச்சி யில், டாமியன் பாதிரியாரும் (Father Damien) ஸர் ஜார்ஜ் டர்னர் (Sir George Turner) என்பாரும் மிகவும் ஈடுபட்டனர். டாமியன் பாதிரியார் பெல்ஜிய நாட்டினர். அவர் ஒரு துறவி. குஷ்டரோகிகள் மட்டும் வசித்துவந்த மாலோகை (Molokai) என்ற தீவிற்குச் சென்றுத் தம் ஆராய்ச்சிகளேச் செய்யலாயினர். அங்கே, பன்னீ பாண்டுகளுக்குப் பின்னர் அக்கொடிய கோயால் பீடிக்கப்பட்டு இந்ற தார். ஸர் ஜார்ஜ்டர்னர் ப்பெடோரியா (Pretoria) என்ற நகரின் புறத் திருந்த குஷ்டரோக நிலேயத்தில் ஆராய்ச்சிகள் செய்து வந்தார். பின்னர் தம் நாடு சென்றபோது, அந்நோய் வாய்ப்பட்டு உயிர்துறந் தனர். தியாக மூர்த்திகளான இவ்விருவரின் அரும் ஆராய்ச்சிகளின் வின்வாய் பல குஷ்டரோக நிவாரண முறைகள் கண்டுபிடிக்கப்பட்டன. இன்னும் இரு தலேமுறைகளில் அந்நோயே இவ்வுலகினின்று மறை யும்படி செய்வதற்கேதுவான நிவாரண முறைகளுக்கு அவர்கள் வழி காட்டியுள்ளனர்.

சென்ற சில ஆண்டுகளாய் சாவுமணி வண்டு (Death watch Beetle) என்பவற்றுல் ஏற்பட்ட நாசங்களேப்பற்றி கேள்வியுற்றுள் ளோம். அவை விஃயுயர்ந்த மாங்களேக் குடைந்து அழிக்கின்றன. அதனுல் பல்லாயிரம் பொன் மதிப்புடைய மரங்கள் அடியோடு நாச மாயின. இவ்வண்டுகளே அடியோடு கொல்லுவதற்கான **விஷவா**யு வைக் கண்டுபிடிக்கும் ஆராய்ச்சியில், போசிரியர் மாக்ஸ் வெல் லெப் ாய் (Professor Max well Lefroy) என்பவர் முனேந்தார். அவர் இங்கிலாக்தில் சிற்றின நூல் அறிஞரில் (Entomologist) சிறந்தவர். தான் கண்டுபிடித்த வாயுக்களின் தன்மைகளே அறியும் பொருட்டு அவற்றைத் தாமே துணிவுடன் முகர்ந்து பார்த்தார். அவ்வாறு செய்தபோது பன்முறை இறக்கும் தறுவாயிலிருக்கும் உயிர் பெற் நெழுர்தார். அவாது அருஞ்செயஃப்பற்றி போற்றி செய்தித்தாள் கள் எழு தின. அதைக் கண்ட போசிரியர் வருத்தமுற்றுர். ''இச் சிறு கிகழ்ச்சி மிகைப்படுத்தப்பட்டு விளம்பரமானதைக் கண்டு நான் வியப்பு நகேறேன். அது எனக்கு வருத்தத்தையும் யுண்டு பண்ணு கின்றது. இவ்வாறுன சிறு விபத்துக்கள் விஞ்ஞான ஆராய்ச்சிகளிடை நாடொறும் உண்டாகும் கிகழ்ச்சிகளேயாம். அவற்றை விஞ்ஞானி கள் ஒரு பொருட்டாய்க் கருதுவதில்லே" என்று அவர் கூறினராம்.

இரண மருத்துவத்தில் பெரிதும் பயன்படும் மயக்க மருந்து களேப்பற்றின ஆராய்ச்சிகளில் ஈடுபட்ட விட்னி ராசன் வில்சன் (Sidney Rawson Wilson) என்ற மருத்துவர் அவ்வாராய்ச்சியின் கண் தம் உயிரையிழக்க நேர்ந்தது.

போரில் உபயோகிக்கப்படும் விஷவாயுக்களால் கொல்லப்படாது தப்பும் வழிகளேப் பற்றின ஆராய்ச்சிகளில் ஈடுபட்டு மாண்ட விஞ்ஞானி கள் பலர் ஆவர். அவரில் தலேயானவர் லப்டிணன்ட் கர்னல் ஹாரிஸன் (Lieutenant Colonel Harrison) என்பாரும், காப்டன் அலக் சாண்டர் கெம்பல் (Captain Alexander Gemmel) என்பாருமாம்.

போசிரியர் ஜே. பி. எஸ். ஹால்டேன் (Professor. J. B. S. Haldane) காற்றறைக்குள் நடை பெறும் நிகழ்ச்சிகளே அறிதற்கான ஆராய்ச்சுகளிலீடுபட்டார். காற்றறையில் வெளியே யிருந்து உள்ளே எதுவும், உள்ளே யிருந்து வெளியில் எதுவும் செல்ல இயலாது. வறையில் அவர் தம்மை அடைத்துக் கொண்டார். கரி ஒருயிரி (Carbon monoxide) எனும் வாயுவை உட்கொள்வதால் ஏற்படும் விளேவுகள் பாவை பென்பதை அறியவே அவர் துணிவுடன் இச்சோ தனேக்குத் தம்மைத் தாமே உள்ளாக்கிக் கொண்டார். தன்னுடன், அவ்வாயுவை உட்கொள்ளாது, உயிரியத்தை (Oxygen) உட்கொண் டிருந்த மற்றுருவரை தமது நிலேமை அவ்வப்போது எப்படி யிருந் தது என்பதைக் எவனித்துக் குறித்துக் கொள்ளுமாறு செய்தார். வாயுவை உட்கொண்ட சிறிது காலத்திற்குப்பின் அவர் மெய்மறந்த கிலமையை யடைந்தனர்; தன் கையிலிருந்த கண்ணுடியின் பின்புறத் தில் முகத்தைப் பார்த்துக் கொண்டிருந்தார். இன்னும் இது போன்றே . அவர் செயல்கள் விக்கையாயிருக்**தன. ஆ**டியும் பாடியும் குடி. வெறியுடன் இருப்பதுபோல் தோன்றிஞர். இவை யாவற்றையும் அவருடனிருந்தவர் கண்டார். இங்ஙனம், ஹால்டேன் பல சோதண்களுக்கு உட்பட்டார். இவற்றின் விளேவாய் தரையின்கிற் வேஃசெய்யும் கனித் தொழிலாளருக்கும், வானில் பவனத்திற் கப்பாலும் பறக்கும் விமானிகளுக்கும் மிகவும் பயன்படும் அறிவைப் பெற ஏதுவாயிற்று.

ஸர் ஹென்ரி ஹெட் (Sir Henry Head) என்ற மருத்துவ விஞ் ஞானி, பல வேறுபட்ட உணர்ச்சிகளுக்குக் காரணமான கரம்புகள் யாவையென கண்டுபிடிக்கும் கிமித்தம், தம் இடது முழங்கையின் கீழிருந்த உணர்ச்சி கரம்புகள் துண்டிக்கப்படுமாறு செய்தார். இச் சோதணேயினின்று, கரம்புகள் இருவகையானவை யென்றும், ஒரு வகையானவை சூடு, குளிர், வலி இன்னேரன்னவற்றை உணர் விப்பவை யென்றும், மற்றுரு வகையானவை, ஊறைணர்ச்சியை அறிவிப்பவையென்றும் கண்டுபிடித்தார். வெட்டப்பட்ட கரம்புகள் பின் ஒன்று கூடி அவர் யாதொரு ஊனமுமின்றி தப்பினுரெனினும் அவை துண்டிக்கப்பட்டபோது, அவ்வாறு நாம்புகள் ஒன்று சேரு மென்று எவரும் எண்ணவில்ஃ. எனவே விஞ்ஞானத்திற்கென தம் உறப்பையும் உயிரையும் இழக்கத் துணிந்த ஹெட் ஒரு இலட்சிய வீரரேயாவர். கஸ்டாப் டேலன் (Gustaf Dalen) என்ற ஸ்வீடன் நாட்டு விஞ்ஞானி, மக்கள் நடமாட்டமற்ற தனிமையான கடற்கரை யோரங்களில் விளக்குகள், இரவில் எரியவும் பகலில் அணேந்திருக்கவும் செய்வதற்கான சாதனங்களேக் கண்டுபிடிக்கும் ஆராய்ச்சிகளிலீடுபட்டு வெற்றிபெற்றுர். அவ்விளக்குகள் ஆழ்கடல் சென்று மீன்பிடிக்கும் செம்படவர்க்கும் மாலுமிகளுக்கும் பெருந்துணேயாயுள்ளன. அவ் வாராய்ச்சியிலீடுபட்டிருந்த காலத்து, கரியடுவாயு (acetylene gas) போன்ற வாயுக்கள் அமுக்கிவைக்கப்பட்டிருந்த குழல்களேக் கையாள வேண்டியிருந்தது. ஒருநாள் அக்குமுலொன்ற வெடித்ததனுல் டேலன் ஒரு கண்ணே இழந்தார்.

விஞ்ஞானிகளின் வீரச்செயல்கள் சோதணே மன்றத்தினுள் மட்டும் ஆற்றப்படுபவையன்று. அறிவை நாடி அவர்கள் உயர்ந்த மலே கள் மீதேறுகென்றனர்; ஆழ்கடலினுள் மூழ்குகின்றனர்; பணி வெளி களேக் கடக்கின்றனர்; விண்ணில் பறக்கின்றனர்; எரிமேஃகெளினுள் புகுகென்றனர். சி. ஜி. கர்டிஸ் (C. G. Curtis) என்ற நிலநூல் விஞ்ஞானி மாண்ட் பெலி (Mont Pelce) என்ற எரிமலே வெடித் தெரிந்து கொண்டிருந்தபோதே அதன் வாயினுள் சென்றுர். அவ் வாயின் விளிம்பு சாம்பல் மயமாய் இருந்தது. மூச்சைத் திணாச் செய்யும் கர்தகப்புகை எங்கும் கிரம்பியிருர்தது. இவற்றைக் கடர்து கர்டிஸ் அவரது துணேவருடன் சென்றனர் உள்ளே. உள்ளே கல் மாசியும் மண் மாசியும் கலர்த கடும் மழை பெய்துகொண்டிருர்தது. அவர்கள் இவ்வாறு மழை, புயல், புழுதி, புகை யாவற்றையும் பொருட் படுத்தாது அங்கு நடந்தேறின இயற்கை நிகழ்ச்சிகளேக் காண முயன் **றனர். ஆயினும் அக்குகை புகையாலும் பு**ழு தியாலும் மூடுண்டிருந்**த** மையின் எதையும் காண இயலாது போயிற்று. பின் ஒருவாறு உயி ருடன் வெளியேறினர்.

ஆயினும், வைட் (White) என்ற மற்றெரு விஞ்ஞானி கொலம் பியா (Columbia)விலுள்ள ப்யூரேஸ் (Purace) என்ற பதிண்க்காயிரம் அடி உயரமான எரிமலேயின் வாயினுட் சென்றனர். அங்கு முற்றும் கொழுக்துவிட்டெரிக்து கொண்டிருக்த அனலின் காட்சியைக்கண்டார். அத்தீயானது பலதிற நிறங்களுடன் ஒளிர்வதைக் கண்டார். அக்கிறங் கள் அங்குள்ள உப்பியம் (Sodium) சிவப்பியம் (Strontium), ஙிலவி யம் (Magnesium) கிறமியம் (Chromium), இன்னோன்னவை சுடர் விட்டெரிவதால் தோன்றுபவையென்று கண்டார்.

அலெஸ்ஸாண்ட்போ மல்லாட்ரா (Allesandro Malladra), ப்ராங்க் பெர்ரட் (Frank Perret) என்றேர் வெஸூ வியிஸ் (Vesuvius) எரிமலேயின் வாயினுட் சென்று ஆயிரம் அடிக்குக் கீழிருந்த அதன் அடிப்புறத்தைச் சேர்ந்தனர். தீக்குழியில் ஒரிரவைக் கழித்தனர். பலவகையான அற்புத நிகழ்ச்சிகளேக் கண்டனர். அவற்றைப் படம் பிடித்தனர். இவ்வாறு கண்டறிந்தவற்றின் உதவி கொண்டு அவ்வெரிமலே வெடித்து எரிவதற்குப் பல நாட்களுக்கு முன்னரே, அந்நிகழ்ச்சியைப் பற்றிய முன்னெச்சரிக்கையைப் பெற்று, அவ்விபத்தால் ஏற்படும் உயிர்ச்சேதத்தையும் பொருட் சேதத்தையும் தவிர்க்கலாம் என்று அவர் கண்டுபிடித்தார்.

பிகார்ட் (Piccard) என்ற பெல்ஜிய காட்டு விஞ்ஞானி, பவனத் திற்கப்பாலுள்ள மேற் படலத்தை (Stratosphere)ப் பற்றிய ஆராய்ச்சிகளில் முதன் முதலாய் ஈடுபட்டனர். அவர் ஒரு பெரும் புகைக் கூண்டில் ஆறமைல்கள் விண்ணில் சென்று தம் ஆராய்ச்சி களேச் செய்தார். பின்னர் அவரே, பத்தேகால் மைல்கள் உயரம் சென்றுர். இதன்பின், பல நாட்டு விஞ்ஞான ஆராய்ச்சியாளரும் இவ்வாறுன மேற்படல ஆராய்ச்சிகளிலீடுபட்டு வானில் பறக்கலா யினர். அவ்வாராய்ச்சிகளின் விளேவாய், ஒலி பரப்பலுக்கும், விமா னப்போக்கு வரத்திற்கும் உதவி செய்யும் அறிவுப்பெருக்கம் ஏற்பட் டுள்ளது. விண்ணியல் கதிர்களே (Cosmic Rays)ப் பற்றின அறிவும் அதிகரித்துள்ளது.

ஆண்டு தோறும் இவ்வாறுன விஞ்ஞான வீ சிர்ன் எண்ணிக்கை அதிகரித்தக்கொண்டு வருகிறது. அறிவைப்பெருக்கும் அரும்பணியில் அவர் எதையும் செய்யத் துணிகின்றனர். விஞ்ஞான ஆராய்ச்சி களில் அவர் பெற்ற வெற்றிகள் பலவாம். மக்கள் எல்லோரும் அவ் வெற்றிகளின் பயணே அடைகின்றனர். வெற்றியடைபவரைப் பல காட்டினரும் போற்றுகின்றனர். விஞ்ஞானம் பல காடுகளிடையுள்ள வாம்புகளே யறியாது. விஞ்ஞானத்தின் விளேவியல்கள் உலகிற்கே பொதுவானவையாம். அவற்றைக் கண்டுபிடிக்கும் முயற்சியில் துணிவுடன் ஈடுபட்ட எல்லோரும் மக்களினத்திற்கே பொதுவான உண்மை விஞ்ஞான வீ சர்.

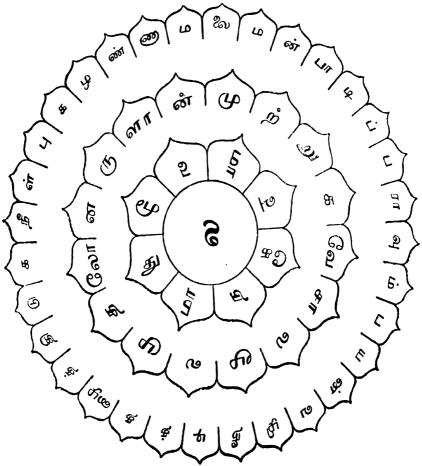
ஆனரபிள் டாக்டர் ராஜா சர். S. R. M. அண்ணுமலேச் செட்டியார் அவர்கள் KT. L. L. D.

அறுபதாம் ஆண்டு நிறைவு விழா நாள்

பாராட்டு

பதும பந்த சித்திரகவி

மாலதுல மூலவல மாலவுல கேல கல மூலமுதலோ னருளான் முற்றுகவே—சாலவழி கீடித் தழைத்திடுக கீள்பு கழண்ணுமலே மன் பாடிப் பராவும் பயன்



VIDWAN. T. P. PALANIAPPA PILLAI, B. O. L. S. V. O. I. Tirupati.

தமிழ் இசை வளர்ச்சித் த2லவர்

K. Ponniah Pillai (University of Madras)

இத்தமிழ் நாட்டின்கண் பண்டு தொட்டு, சோ, சோழ, பாண்டிய மன்னர்களாலும், மற்றும் பல செற்றாசர்களாலும் போற்றப்பட்டு வர்த, இயல், இசை, நாடகம் என்னும் முத்தமிழும் இடைக் காலத்தில் அவற்றின் நிஃயினின்றும், சிறிது வழுகியிருக்தும், இயற்றமிழ்க் கூஃ யானது, சில பெரியோர்களின் பெரு முயற்சியால், இறக்துபட்டவை நின்றதில் பெரும்பான்மையானவை வெளிவருவாயின. ஆனுல் இசைத் தமிழ்க் கஃயோ என்றுல் நாளுக்கு நாள் கீழ் நிஃபை அடைந்து கொண்டு போவதோடல்லாமல் தமிழில் இசைப் பயிற்சி உண்டாயிருர்தது என்று சொல்லுவதற்குக் கூட இடமில்லாதவாறு, போய் விடுமோ, என்று ஐயுறவேண்டிய கிலேக்கு வக்து விட்டது. அதனேப் பழைய நிலேக்குக் கொண்டுவா வேண்டியது அரசர்களின் கடனுதலால், அதனே உணர்ந்து நமது அரசர், ராஜா. சர். அண்ணு மணேச் செட்டியார் அவர்கள், பல கணேகளேயும் உயர்*த்த* வேண்டுமெனப் பெரியதொரு எண்ணம் கொண்டு தமிழுலகம் போற்ற அண்ணுமஃப் பல்க‰க் கழகம் நிறுவினர். அதனினும் சிறப்பாக எந்நாட்டாராறும் போற்றத் தகுர்ததும் இதுவரையும் எவராலும் செய்யப்பட்டிராத அரும்பெருக் தொண்டாம் இசைக் கலேயை வளர்க்கும் அரும் பணியை மேற்கொண்டு, உயர்ந்த முறையில் தொண்டாற்றி வருகின்ருர். அவ் விசைக் கஃயானது. தமிழில் பல்லாயிர ஆண்டுகட்சூ முன்னரே இருர்து வர்தது என்றதற்கு ஆதாரங்கள் பல இருக்கின்றன. அவற்றுள் தலே சிறர்து விளங்குவன. ''இசை நாணுக்கம்'', ''பெரு நாரை'', ''பெருங்குருகு'', '' தாளவகை ஒத்து ''. முதலியனவாகும். பழைய தமிழ் நூலாகிய '' பரிபாடல்'' என்பதிலும், இசையிணப் பற்றி அறி யலாம். இவ்விசை இலக்கணத்தை உணர்ர்தே, இடைக்காலத்திற் ரேண்றிய ''தேவாரம்'' ''திருவாய் மொழி'' இவைகளே இயற்றிய இசைப் புலவர்களாகிய சைவசமய குரவர்களும், வைணவ ஆழ்வாரா தி களும் செய்திருக்கின்றனர் என்று புலனுகின்றது. இன்னும் அவை

கள் இசையுடனே தமிழ் நாட்டின்கண் பயிலப்பட்டு வருகின்றன. அவை எக்காரணத்தாலோ, இசையின்பாற் பட்டதாகத் தற்கால இசை வல்லு நர்களால், கொண்டாடப்படவில்லே. இதணேக், காலஞ் சென்ற தஞ்சை, சாவ்சாகேப், கே. சினிவாசம் பிள்ளே அவர்கள் ''தமிழ் வரலாறு" என்ற நூலில், "தேவாரப் பண்களில் காணப்படும், பண் செவ்வழி, தக்கராகம், பழம்பஞ்சுரம், தக்கேசி, ஈட்டராகம், சீகா மாம், குறிஞ்சி, கார்தாரம், இன்னேரன்ன பிறவும் இக்காலத்திற் கொண்டுள்ள, ராகதாள அமைப்பை விடச் சிறந்தனவாக இருந்தன" என்று குறிப்பிடுகின்றுர். இதனேயே வற்புறுத்திப் பரிதிமாற் க‰ஞன் எனத் தமிழ்ப் பெயர் தாங்கிய சூரிய நாரயண சாஸ்திரியார் அவர்கள் தாம் எழுதிய ''தமிழ்மொழியின் வாலாறு'' என்ற நூலில், ''இடைக் காலத்திற் ரேன்றிய இசைத் தமிழ் இலக்கிய நூலாகிய மூவர் தேவாரங் களும், தமிழிற்கே உரிய பண்ணும் திறனும் பயின்றனவாக ஒளிர்கின் றன. இத்தேவாரங்களுக்குப் பிண்னர் ஏற்பட்ட இசைத்தமிழ் இலக்கிய நூல்களில் வடமொழி ராக அமைப்பும் தாள வகையும் காணப் படுகின்றன என்றும் அதுவுமன்றி இக்காலத்தில் கிலவுறும் இலக்கியமும், இலக்கணமுமாகிய இசைத்தமிழ் நூல்கள் எல்லாம், ''மேள கர்த்தா'' என்னும் வடமொழி நூஃத்தழுவியே அமைக்கப் பட்டிருக்கின்றன" என்றும் கூறுகின்றுர். ஆதலின் அதற்கு முன் னரே தனித்தமிழில் இசைநூல் இருந்திருக்கவேண்டும் என்பது தெளிவாகின்றது. இறைவன் கீர்த்தியைப்பாடும் பாட்டிற்கு, கீர்த் தனம் என்றும் அழகாகப் பெண்கள் பலர்கூடி வரிசையாக கின்று பாடும் பாட்டிற்கு ''வரிப்பாட்டென்றம்'' சிறு சிறு முடிபுகளாகக் கேட்போர் எளிதில் அறிந்துகொள்ளும் பாட்டிற்குச், '' சிந்து'' என்றம், இவையல்லாது, ஆனர்கக்களிப்பு, கும்மி, என்றும், பெயரிட்டு, பலபாட்டுகள் செய்திருக்கின்றனர் என்றது மறக்க முடியாத உண்மை. சிலப்பதிகாரம் என்ற நூல், இயல், இசை, நாடகம் என்ற முத்திறக்கஃபையும், உடைத்தாயிருத்தல், இன்று கண்டு வருகின்றேம். அதுவுமன்றி நூலாசிரியர் பெயர்கூடக் காணப் படாத அவ்வளவு பழமையான "முக்கூடற்பள்ளு" முதலான நூல் கள் இசையோடு கூடியதாக இன்றும் காணப்பட்டு வருகின்றன. அவைகளில் நாம் இன்னும் கேட்டிராத பல இசை நணுக்கங்களும் அமைக்துஉள்ளன. 96 பேபக்தங்களில் ஒன்றுகிய ''கலம்பகம்'' என்னும் போபர்தத்தில், குறம், மறம், அம்மானே, தாழிசை என்

பண போன்ற இசைகள் எல்லாம் காணப்படுகின்றன. நாடகத்தமிழ் தூல்கள் அளவிறந்தனவாக இருந்தன என்று கேட்கப் படுகிறது. அவற்றுள். ''பாதம், அகத்தியம், முறுவல், சயர்தம், குண **நால், செயிற்றியம்'' என்பன இரு**ர்தனவாகக் காணக்கிடைக்கின் இதனுல் அறியக்கிடப்பது என்னவென்றுல், இசையிணப் பற்றிக் கூறும் நூல்கள் தமிழில் இல்லேயானுல் இயலும், இசையும் கூடியதாகிய நாடகம் இல்லா திருந்திருக்கவேண்டும். அப்படிக்கில்லாமல் பல அரிய நாடக நூல்கள் இருந்ததனுல், அவற்றிற்கு முன்னதாகவே இசை நாற்களும், இசைவல்லு சுர்களும், இருந்தனர் என்பது கிளங்கு கின்றது. ஆணல், இக்துணேச் சிறப்பிணே உடையதாகிய தமிழ் இசை, இப்போது இல்லாமைக்குக்காரணம் என்ன என்று கேட்பார்களே யானுல், இடைக்காலத்தில் தமிழ் நாட்டில் வந்து குடியேறியவர்களில், சைனர் முதலான மோஷகாமிகள், இசை காமத்தைத் தூண்டு தலால், அது வீடுபேற்றிற்குத் தடையாகும் என்று சிறிது சிறிதாக அகற்ற லாயினர். வக்தோரை ஆதரிக்கும் குணம் படைத்ததமிழர்களும், அதணேயே கைக்கொள்ளலாயினர். இக்கதையிண அறிந்த தமிழிலேயே வளர்க்கவேண்டும் என்ற ஆர்வங்கொண்டு, அதற்கு அரும்பெரும் பாடுபட்டுவருகின்றுர். அன்ரைக்குத் மக்களாகிய நாம் **என்**றும் மறக்க முடியா*த* கடப்பாடுடை**ய** வர்கள் ஆவோம். அத்தகைய அரசவள்ளலார் பல்லாண்டு வாழ்ந்து, பல்கலே அணேத்தையும், உயர் நிலேக்குக்கொண்டுவர்து பல்லுலகமும், வாழ்த்தவாழுமாறு, எல்லாம் வல்ல இறைவனே வணங்குகின்றேன்.

[†] அழிக்த சிலுவை 124

சிவமயம்.

பாலாறவாயர் துணே.

Bala Kavi V. Ramanatha Chettiar (Devakottai) கனம் டாக்டர் ராஜா சர் அண்ணுமூலச் செட்டியாரவர்களின் அறுபதாண்டு கிறைவு மணத்திற்குக் கூறிய

வாழ்த்து.

திருளிற் பொலியுக் தென்னர் தமிழ்ச் செல்வ காட்டிற் றனவணிகர் மருளித் திகழும் பதிகளிற்பல் வளத்தா லோங்கி வளருவது தருவிற் றிருவிற் சாபியினிற் சாரு நிதியில் மணியிலொரு பொருளி லமரா புரியெனவே புகலப் பெருஞ்சீர் பொருக்துவதால்.

1

2

3

பெரிய கோயிற் சிவலோகன் பிறங்கு மருளாற் றிருவாளர் உரிய எலஞ்சேர் காளுடு காத்தா ளுங்கே யுறைவணிகர் கரிப வால மிடறடக்கிக் கருணே புரியுங் கயிலாய கிரிய னித்ய கலியாணி கிளரும் பணியிற் கிழமையுளோர்.

குலவுஞ் சீர்த்தி யிளேயாற்றக் குடியாங் கோயில் மாபுடையார் நிலவம் மரபி லெழுகிளயில் நின்ற புகழ்ப்பட் டணசாமி யிலகும் பிரிவில் முத்தையவேள் இயற்றுதவத்தா விவண்வர்தான் உலக முழுது மிசைபரப்பி யொருவ னென்ன வுயர்தவத்தான்.

அறிவிற் றிருவி லாண்மையினி லழகிற் கொடையி லாற்றவினில் நிறையிற் பொறையிற் கல்வியினில் நிலேயிற் பொலிவி னேயமதில் குறிகொள் தவத்திற் பெரும்புகழில் குணத்திற்றுனே தனக்கொப்பா யுறையுங் கனவா னுயாண்ணு மலேவே சென்றே யுரைபெறுவோன். 4

5

அரசர்க் கரசர் மிகமதித்திங் களித்த புகழ்சேர் டாக்டர்சர் அரசர் முதலாம் பட்டங்களார்க்து தில்லேயம்பலக்கூத் தரசர் மகிழப் பலபணிசெய் தழியாப் புகழை யடைந்து சிவ னரசர்ப் பேச னருள்மிகுந்தா னண்ணு மலேநன் னகர்கண்டான்.

தண்ணர் தமிழும் சமயமும்வான் தகவிற் செழிக்கச் செயல் புரிவான் அண்ணு மஃப்பல் கஃக்கழக மமைத்திவ் வுலகுள் ளளவுமிசை விண்ணே ருலகுஞ் செலப்படைத்தான் மேலாக் தமிழிற் கணிதமுயர் பண்ணு தியவல் லார்தமக்குப் பரிசி லளிக்கும் பண்புடையான். 6

கல்வி கிஃவயம் பலகண்டு கற்பார்ப் புரக்குங் கனமிகுர்தான் செல்வம் பிணியற் றிருத்தலெனத் தெளிர்து பலவாம் பதிகளினில் மல்லல் மருர்துச் சாஃவைத்த வள்ள லறத்தின் வரம்புகண்டோன் இல்ஃல யெனுமொன் றில்லாதோ னினிய மொழிக ளியம்பிடுவோன். 7

வெற்றி விசுவிற் புரட்டாதி மேவு முந்நான் கின்னு ளிற் கற்றைச் சடையான் கருணேயினுற் கருது மாறு பத்தாண்டு முற்று மணத்தைக் கொண்டுயர்ந்தான் முதல்வன் அருளாற் பல்லாண்டு சுற்றம் புதல்வர் தூணேவரொடு சுகமே வாழ விறைஞ்சுதுமே.

கலம் பெருகுக.

பெருமைதங்கிய டாக்டர் செட்டிகொட்டு ரொஜா ஸார் அண்ணுமேலூச் செட்டியோர் Kt., L. L. D. அவர்களின் அறுபதாம் ஆண்டு நிறைவுபிழோபில் அண்ணுமலேப் பல்கலேக் கழகத்துத் தமிழாசிரியர்

பண்டிதர், லெ. ப. கரு. இராமநாதன் செட்டியார் கூறியவை

(Chiase Gaimile)

- அண்ணு மலேவேக் தறுபதாம் யாண்டுவிழாக் கண்ணுக் கண்டுகனி காதலித்து — விண்ணேர்கள் கண்ணிமையா ராயிணெவர் கண்டறிக் தம்மாண்பை எண்ணி யுரைப்பா ரிவண்.
- 2. செல்வ வணிகன் திகழ்செட்டி நாட்டாசன் கல்வி மிகுபல் கலேக்கழகம் — எல்லாரும் போற்ற நிறுவினேன் பொன்மணேவி மக்களொடும் ஏற்றமிக வாழ்கவினி தே.
- 3. தில்லேச்சிற் றம்பலவன் சிரருட் செல்வத்தால் எல்லேயில் கீர்த்தி எழிலீகை — கல்வியுரம் மன்னிவள எண்ணு மலேவள்ளல் வாழ்கவுளத் துன்னியன வுன்னியவா அற்று.

உயர்திரு, அண்ணும‰ யரசர்

(பண்டித. லெ. ப. கரு. இராமகாதன் செட்டியார்)

பெருமை தங்கிய டாக்டர் செட்டி நாட்டு ராஜா ஸர் சா. ராம. மு. அ. அண்று மீல்ச் செட்டியார் Kt; L. L. D. அவர்கள், இராமகாதபுரம் ஜில் லாவைச் சேர்க்த காளுடுகாத்தான் என்னும் ககரில், தனவணிகர் மாபில், இன்யாற்றங் குடிக்கோயிலிற், பட்டினச்சாமி என்ற பிரிவைச் சேர்க்த முத்தைய செட்டியாரவர்கட்கு மீனுட்கி ஆச்சி அவர்களிடம் விஷு பாண்டு புரட்டாசித் திங்கள் மிசு (30-9-1881) ஆம் காளில் தோன்றிய தவப்புகல்வராவார்கள். கிகழும் விஷு பாண்டு புரட்டாசித் திங்கள் மிடி (28-9-1941) ஆம் காளில் இவர்களின் அறு பதாம் ஆண்டு கிறை வெய்துகின்றது. இவர்கள்,

'' மங்கல மென்ப மினமாட்சி மற்றத னன்கல நன்மக்கட் பேறு ''

என்பதற் கேற்பத், தம் மீனக்கு விளக்காய் நற்குண அரசுயாய்த் திகழும் சீரை ஆர்சி என்னும் எங்கையோடும், அறிவறிந்த மக்கள் எழுவரோடும், அவர்கள் மக்களோடும் மகிழ்ந்து வாழ்கின்முர்கள். சீதை ஆச்சியார் தம் பெயருக்கேற்ப எட்டு இலக்குமிகளாகவே இலங்குகின்முர்கள்.

ent tiat

இவர்களின் முதற் புதல்வரும், சென்ணேயிற் கல்வி மந்திரியாயும், இருமுறை மேயராயும், பண்முறை சட்ட சபை உறப்பினராயும், ஜஸ்டிஸ் கட்சித் தலேவராயும், இன்னும் பல கூட்டங்களில் தலேவராயும், உறப்பினராயும் அமர்ந்து சிறந்த பல செயல்கள் செய்து, நாட்டுக்கும் மொழிக்கும் பேருதவி புரிந்து வருபவர்களும், அறிஞரெல்லாம் மதிக்கு மாறு, உள்ளத்திற் பதிந்து உணர்ச்சி ததும்பச் சொற்பொழி வியற்றுந் திண்மை, அறிவின் துண்மை, வண்மை முதலிய உயர்குணங்கட்கு உறைவிடமும் ஆகிய குமாரராஜா ஸர் முத்தைய செட்டியார் B. A. அவர் களே அறியாதார் ஒருவருமிலர்.

> '' கீவா ழியர்கின் தக்தை தாய்வா ழியர்கிற் பயக்திசி ணேரே ''

என அவர்களே வாழ்த்துவோமாக.

கல்கியும் நுண்ணறிவும்

அண்ணுமலே யாசர், தமிழிலும் ஆங்கிலத்திலும் கல்ல தேர்ச்சி யுடையவர்களாய், மாபெருங் கூட்டங்களில் தலேமை தாங்கிக், கேட்டாமீன வரும் வியப்புற்று வயப்படுமாறு சொற்பொழி வாற்று தலேக் கண் கூடாகக் காண்கின்றேம். இவர்கள் திறந்து வைத்து அறிவுரை வழங்கிய அறகிலேயங்கள் பல. ககரத்தார்களின் தொண்ணூற்றுறார்க் கூட்டத்திலும், பிற கூட்டங்களிலும் யாவரும் உடன் படுமாறு பேசி இவர்கள் செய்த கலங்கள் பல. தம் குலவிச்சையாகிய வாணிகத் தொழிலில் நிகரற்ற திறம் படைத்தவர்களென்பதற்கு இவர்களின் பரந்த வாணிகமும் விரிந்த செல்வமுமே சான்றும். தனவணிகருட்பாங்கி வைத்தல் முதலிய முறைகளே முதலில் மேற்கொண்டு கடாத்தி வருகின்ற சிறப்பு இவர்கட்கே யுரியது. இன்கம்டாக்ஸ் கமிஷனில் ஒருறுப்பினராயிருந்து இவர்கள் தம் நுண்ணறிவாற் செய்த நன்மைகள் தனவணிகர்களாலும் மற்றைச் செல்வர்களாலும் என்றும் மறக்கப்படாதன.

லண்டன்மாரகருக்குச் செல்லுங்கால் வங்கத்தில் இவர்களோடு அளவளாவிய ஒராங்கிலேயப் பெரியார், 'இவர்கள் அறிவு இவ்வுலக முழு**தையும் ஆளும் ஆழமுடையது** ' எனக் கூறியதாக யான் கேள்வி யுற்றதுண்டு.

> '' இருவே றுலகத் தியற்கை திருவேறு தெள்ளிய ராதலும் வேறை''

எனத் தேவர் கூறிய உலகியல்புக்கு மாறுக இவர்கள்பாற் செல்வமும் அறிவும் திகழ்தல் பெருக் தவப்பயனேயாம்.

பிற சிறப்பியல்புகள்

இவர்கள் தில்லேச் சிற்றம்பலவன் திருவடிகளே உள்ளத்துட் பதித்தவர்கள்; ''மடியிலான் தாளுளாள் தாமரையிஞன்'' ''முயற்சி திருவிணயாக்கும்'' என்னும் முதுமொழிகளே நன்குணர்ந்து சோம்பு தலே வேரறக் களேந்து விடாமுயற்கியை மேற்கொண்டவர்கள்; எச் செயலேயும் எண்ணித் துணிந்து எண்ணி யாங்குச் செய்து முடிக்குந் திண்மை வாய்க்கப்பெற்றவர்கள்; இவர்களின் அசைவிலா ஊக்கமே ஆக்கம் அதர்விறைய் வருதற்கும் உலகத்துயர்ந்த வள்ளியமென யாவ ருங் கொள்ளுதற்குள் காரணமாயுள்ளது.

> " இழுக்காமை யார்மாட்டு மென்றும் வழுக்காமை வாயி னஃதொப்ப தில் "

என வள்ளுவர் பெருமான், வாய்த்தலரிதென்று கூறிய மறவாமைக் குணம் இவர்கள்பால் இனிது நிஃபெற்றுளது.

> '' சொல்லுதல் யார்க்கு மெளிய வரியவாஞ் சொல்லிய வண்ணஞ் செயல் ''

என்னும் பொய்யா மொழியில் யாவருக்கும் எளிய வெனவும் அரிய வெனவுங் கூறப்பட்ட சொல்லு தலுஞ் செய்தலும் இவர்கட்கு முறையே அரியவாகவும் எளியவாகவும் அமைக்குள்ளன; இஃ தொன்றே இவர்கள் வீறுடைமைக்குத் தக்க சான்மும்.

தாம் அரசராதற்கியைய ஆட்சி புரியுக் துறையில் ஒப்புயர்வற்ற வர்கள்.

> '' இதனே மிதனை லிவன்முடிக்கு மென்றுய்க் ததனே யவன்கண் வூடல்''

என்னும் அறிவுரைக்கு இவர்கள்பாற்பல உதாரணங்கள் நாம் கண்டு வியக்குமாறு உள்ளன.

AD

செல்வரிற் பலர் தம் செல்வத்தைத் தமக்கும் பிறர்க்கும் பயன்படுத் தாது, பற்றுள்ள மென்னும் இவறன்மையை மேற்கொள்ளுகின்றனர்; இவர்கள் அங்ஙனமின்றிச் ''செல்வத்துப் பயனே யீதல்'' என உணர்க்து இயற்றிய அறங்கள் எத்துணேயோ பல.

உடற்கு அதிபயக்கும் உண்டிச் சாஃகட்கும், மருத்துவச் சாஃ கட்கும், உயிர்க்கு உறுதி பயக்குங் கல்வி ஙிஃயங்கட்கும், தெய்வத் திருக் கோயில்கட்கும் பெரும்பொருள் வழங்கியுள்ளார்கள். ''மக னறிவு தந்தையறிவு'' என்னும் முதுமொழிக்கிணங்க இவர்கள் தந்தையார், சிற்றம்பலத்திற் பொன்வேய்ந்ததும், தமையனர், தில்ஃல யில் ஒருயர்தாப் பள்ளி நிறுவியதும், உண்ணு கீரளித்ததும் முதனிய முன்னேயோர் செய்த அறங்கள் உன்னி மகிழற்பாலன.

ஈத்துவக்கும் இன்பம் அறிந்த அண்ணுமூல வள்ளல்

'' எத்துணே யாமினு மீத்த னன்றென மறுமைвோக் கின்ரு வன்றே முறர், வறுமைகோக் கின்றவன் கைவண் மையே''

என்றுங்கு மறுமை கோக்காது பிறர் வறுமை கோக்கிப் பேரருளாற் செய்**த அ**றங்கள் பலவற்றைப் பலர் வாயிலாகப் பன்முறை கேட்கி<mark>ன</mark>் ேறும்; இங்ஙனங் கொடுப்பாரைக் காண்டலரி.து. வள்ளல்களின் இயல்புகளென நூல்களிற் படித்தறிந்தவற்றை இவர்கள்பால் நேரிற் கண்டு வியக்கின்றேம். இவர்களேப் பாடியும், சிறந்த தமிழ் நூல்களே இவர்கட்கு உரிமையாக்கியும் புலவர் பெருமக்கள் பெற்ற பரிசில்கள் பல. யான் இளமைப் பருவத்துக், கொழும்பில், இவர்கள் ராஜாப் பட்ட மெய்தியதைப் பாராட்டிப் பாடியபோது, என் ஆசிரியருக்குப் பல பவுன்கள் வழங்கிய வள்ளன்மையையும் மறவாது ஈண்டுக் குறிப் பிடுகின்றேன். மூவேர்தருமற்றுச் சங்கமும் போய்ப் பாவேர்தர் காற்றிலிலவம் பஞ்சாகப் பறக்கையிலே தேவேக்திரதாருவைப்போல் இவர்கள் தோன்றி ஆதரித்துப், பல்க‰க் கழக வாயிலாகவும் வேறு பல வழிகளிலும் கமிழை வளர்த்து வருவது இவர்கட்கேயுரிய தனிப் பெருஞ்சிறப்பாம். அண்மையில், இவர்கள் தமிழிசை வளர்ச்சி கரு திப் பெரும் பொருள் வழங்கியதும், அண்ணுமஃப் பல் ஃஃக் கழகத்திற் பெரியதொரு தமிழிசை மாநாடு நிகழ்ந்ததும் அறிஞ ரறிக்தனவே. ''அருளின துறையுள் கல்லறத்தின் வேலி'' உள் மருள நு தமிழ் மொழி வளர்க்குமன்னவர் என்று இவர்களேக் கூறுதல் மிகப் பொ*ருத்த*மாம்.

அண்ணு மகூப் பக்ககூக்கழகம்

அறங்களுட் சிறந்தது மக்கள் அகக்கண்ணேத் திறக்கும் கல்விகற் பித்தலே என நன்குணர்ந்த இப்பெரியார், தம் பெயரால் அண்ணும்லே நகர் என ஒரூரமைத்து, ஆண்டு அண்ணும்லேப் பலக்லேக்கழகம் என ஒரு கேலக்கழகம் நிறுவிய பெருமை உலகம் அறிந்ததே; அண்ணுமலே நகரின் அமைப்பு, மனத்தைத் தூயதாக்கிக் கல்வியை வளர்க்கு நிஃயில் மிளிர் கின்றது; பல்கீஃக்கழகம், தகு திவாய்ந்த அதிகாரிகளேயும், கல்வி சான்ற ஆசிரியப் பெரியார்களேயும், கீஃபெயில் விரோதர்களாகிய பன் ஹாறு மாணவ மாணவிகளேயுர் தன்னகத்துக்கொண்டு கீஃமகள் இல்லம் போற் கவினுறுகின்றது. ஏீனயிடங்களிற் கற்பிக்கப்படாத தமிழ் ஆனர்ஸ் வகுப்புக்கல்வியும், ஏீனயிடங்களில் இல்லாத பண்டிதர் பயிற்சிக்கல்வியும், இன்னும் பல சிறந்த கல்விகளும் மல்கப்பெற்று அறிவின் திருவுருவாய் விளங்குகின்றது. கரும்பயிலக்கூலிகொடுத்தல் போலத் தமிழ், வடமொழி, இசை இவற்றைப்பயிலும் மாணவர் கட்கு இலவசக்கல்வியும், செல்வமும் உதவப்படுகின்றன; எனேக்கல்வி பயிலு மாணவரிலும் பலர் இலவசமாகப் பயில்கின்றனர்.

ஆங்கிலேய ராட்சிக்குட்பட்ட இடங்களிற், பிறரு தவியின்றி ஒரு வரால் நிறுவப்பெற்ற பல்கலேக் கழகம் இஃதொன்றேயெனின், இதனே நிறுவிய இப்பெருந்தகையாளர் புகழ் இவ்வுலகம் உள்ளனவும் நிலேபெறு மென்பது வெள்ளிடை மலேயாம்.

> ''கைம்மாறு வேண்டா கடப்பாடு மாரிமாட் டென்னுற்றுப் கொல்லோ வுலகு ''

என்றவாறு, இவ்வுலகம் இவர்கட்குக் கைம்மாறுபுரியும் ஆற்றலில்லா தது; ஆதலாற் பன்முறை பல்லாண்டுகூறுக் கடப்பாடுடையதாம்.

அரசரங்கம்

இவர்கள் செண்ணே அரசாங்க சபையிலும், டில்லி அரசாங்க சபையிலும், இன்னும்பல அரசியற் கழகங்களிலும் உறப்பினராயமர்ந்து ஆற்றிய நற்செயல்கள் பற்பல; பகவியை விரும்பாமற் செய்த அருஞ்செயல்களும்பல. வைசிராய் அவர்கள் ஆலோசணேக்காக இவர்களே டில்லிக்கு அழைத்தார்களெனின் இவர்கள் அறிவாற்றல்கள் அளவிட்டுக்கூறுந்தாத்தவோ?

இவர்கள் தகு திபையும் ஆற்றஃயும் அறிந்த அரசாங்கத்தார், இவர்கட்கு ராவ்புஹநூர், நிவான் புஹநூர், ஸர், ராஜா என்னும் பட்டங் கணேயும், சென்னேப் பல்கஃலக் கழகத்தார் டாக்டர் என்னும் பட்டத்தை யும் வழங்கெயது போற்றத் தக்கதே. இப்பட்டங்கள் இப்பெரியா சைச் சேர்ந்தமையாற் சிறப்புற்றன என்றே கூறவேண்டும்.

ffgf

பிறசெல்லாம் மறத்தினைல் அரசரானர்கள்; இவர்கள் அங்ஙண மின்றி அறத்தினைல் அரசரானர்கள்; இதனேக் குறித்து யான்,

மறத்திை லாகிய மன்னரைப் போலா தறத்திலை லாய வரசே

எனப்பாடிய துண்டு. இவர்கள் பரம்பரையாக ராஜாப் பட்ட மெய் திய போது கோவிலூர், கொழும்பு, சிங்கப்பூர், இரங்கண் முதலிய இடங்களில் கிகழ்க்த பாராட்டுச் சிறப்புக்கள் தனிப்புத்தகமாக எழு தத் தக்கன; 19-5-1929ல் கொழும்பில் நடந்த சிறப்பை, யானும் காணும் பேறு பெற்றதுண்டு; வரவேற்பதற்குப் புகைரத நிலேயமுதற் பதினுயிரக் கணக்காண மக்கள் திரண்டனர்; புகைரத நிலேயமுதற் செட்டியார் தெருவரை யக்திரவூர்திகள் ஒட வியலாமல் நகர்ந்தன; செல்ல வழியின்றி நின்ற ஊர்திகள் எத்துண்யோ பல. பாராட்டுக் கட்டம் பெரிய தொரு மண்டபத்தில் நிகழ்க்தது; ஆண்டு, ஆயிரக் கணக்கான பெருமை வாய்க்த மக்கள் குழுமினர்; சிறந்த கல்வியும், கீர்த்தியும் நிறைக்க ஸர். பொன். இராமகாதண் அவர்கள் தலேமை பூண்டு பாராட்டி வாழ்த்தினர்கள். அந்காளிற் கொழும்பு நகர்முழு தும் திருவிழா நிகழ்வது போலவே காணப்பட்டது.

தனவணிக *ப*ணவருங் கோவிலூரிற் கூடிப் பாராட்டிய பெருமை சாஜா அவர்கட்கேயுரியது.

லண்டன் மாநகர்

இவர்கள் பொதுவாகப் பர்மாகிலுள்ள இந்தியர் நலமும், சிறப் பாக ஆண்டுள்ள தனவணிகர் நலமும் குறித்து லண்டன்மா நகருக்குச் சென்று வேண்டுவன செய்து உதவிஞர்கள். இவர்கள் அரசியாருடன் லண்டன்மாநகருக்குச் சென்று, அவண் வீற்றிருந்த அரசர் பெருமா னுவம் எண அரசியற்றலேவர்களாலும் போற்றப் பெற்று வந்ததும், அதன் பயனுக இரங்கூன் சட்டசபையில் தனவணிக மக்களுக்கு ஒரிட மும், வேறு சில நன்மைகளும் உண்டானமையும், அந்நன்றிக் கறிகுறி யாகக் கோகிலூரில் தனவணிகர் நடாத்திய பாராட்டுக் கூட்ட நிகழ்ச்சி களும் இன்றும் நிணேகிலுள்ளன; அக்கூட்டத்தில் யானும் பாராட்டி மகிழ்ந்ததுண்டு. தனவணிகருள் கம் மன்னர் பெருமாணக்கண்டு அளவளாவி மகிழ்க்க பெரியார் இக்காள் வரை இவர்கள் ஒருவரேயாவர். பெண்கள் கடல் கடத்தலாகாது என்று கருதிய வணிகர் குலத்தில் தம் மணே வியாரை கெடுக்தூரத்திலுள்ள லண்டன்மா ககருக்கும், அங்கிருக்து பிரான்சு முதலிய இடங்களுக்கும் இவர்கள் அழைத்துச்சென்று வக்தது போற்றத்தக்கது. இதற்கு முன்னெரு முறையும் இவர்கள் லண்ட இவக்குப் போய் வக்ததுண்டு. தனவணிகர் தொன்றுதொட்டுச் செல்வம் உடையராயினும் அரசாங்கத்தாரால் கன்மதிப் பெய்திப் பட்டங்களும் பதவிகளும் பெறுதற்கு ராஜா அவர்களே கிறக்த காரணமாவார்க ளென்பது மறுக்க வொண்ணுதது. உலகப் பெருமக்கள் கிலருள் இவர்கள் ஒருவரென்பது அறிஞாணேவர்க்கும் ஒப்ப முடிக்கதே. இவர் கணே ஒரு முடிது டா மன்னெரென்று கூறின் அது மிகையாகாது.

''வாணன் புகழ்க்கெல்ஃல வாழ்த்துவோர் நாவெல்ஃல ''

என்றுங்கு இவர்கள் பெருமைக்கு எல்லே, என்றும் புகழும் புலவோர் நாவெல்லேயேயாம். அதனே ''விரிப்பினகலும் தொகுப்பினெஞ்சம்''.

வழ்த்துரை

நாட்டுக்கும் மொழிக்கும் பேரு தவி புரியும் இவர்களின் அறபதாம் ஆண்டு நிறைவுக் திருவிழாவைக் கொண்டாடு தல் எல்லோருக்கும் மு தற் கடமையாகும். இவர்கள் உருவச் சிலே பெரிய நகரங்களெங்கும் நிறுவப்பெறவேண்டும். இவ்வேர்தர் வரலாறு அறிஞரால் விரிவாக எழு தப்பெற்றுப் பெரியராலும், இனி உலகம் உயர்நிலே யடை தற்குக் காரணமாகவுள்ள எல்லா மாணவ மாணவியராலும் பயிலப்பெற வேண்டும்.

எல்லாப் பேறுகளும் பெற்றிலங்கும் ஈம் ராஜர அண்றையல் வள்ளல், இன்னும் பல பட்டங்களும் பதவிகளும் பெற்று, இன்புற் றுப், பல்லாண்டு வாழுமாறு திருவருள் புரியக், கருணேக் கடலாகிய சிற்றம்பலவன் திருவடிகளே சீள சிணேக்து சித்தலுக் தொழுகின்றேன்.

சிவமயம்.

குமாவேள் துணே

செட்டி நாட்டரசர் சீர்த்தி

(K. R. M. Ramaswamy Chetty)

Editor "Sivanesan"

முங்கலப்பாண்டி வளநாட்டின்கண், பரம்பரைச் சைவர்களாக வாழும் தனவணிகப் பெருமக்களின் ஒன்பது கோயில்களுள் முதன்மை யான இளேயாற்றக்குடிக் கோயிலில் ஏழு பிரிவுகளுள், சிவகேசுனும் தன தனே தங்குல முதல்வராக, காவிரிப்பூம்பட்டினத் தில் வர்து தித்து, பீடுயர் சிறப்புடன் பெருவாழ்வு பெற்றும், மருதவாணரை மகவாகப் பெற்றும், தத்துவஞானம் பெற்றும் விளங்கிய பட்டினசாமியார் வழித் தோன்றலும், ஈடு கிஃயாளரும், பெருந்திருவாளரும், பெருந்திறலாள ரும், பெருங் கொடையாளரும், பேரறிவாளரும், எல்ஃயில் புகழ் சேர் தில்ஃபம்பதியில் உமையம்மையோடுறை திரு மூலட்டானேசு வாருக்குப் பொற்பணியினுஞ் சிறந்த கருங் கற்பணி புரிந்தும், சிவகாமி யம்மையுடனுய தில்ஃக்கூத்தரின் பொற் சபையதணப் பொற்புறப் புதாக்கியும், அன்னசாஃயாதிய வமைத்தும், திருக்கருவூரானிஃ எனுர் திருத்தலமதனில் கிருபாராயகி, சௌர்தா ராயகியுடனுறையும் பசு பதீசுரரின் திருக்கோயில் திருப்பணி சிறப்புறப் புரிர்தும் செகமெலாம் புகழச் சிரிய வாழ்க்கையை கேரியமுறையில் நடாத்திய பெருந்தகைப் பெரியாரும் ஆகிய காகுடுகாத்தான், சா. ராம. முத்தைய செட்டியார வர்களின் அழியாப்புகழ் அளவிடற்கரியது.

அவர்கள் சிவபுண்ணியப் பெரும் பேற்றிஞல் ''பெறமவற்றுள் யாமறிவதில்ஃ யறிவறிர்த மக்கட்பேறல்ல பிற'' என்னுர் திருக்குற ளுக் கிலக்கியமாக என்மக்களேப் பெற்முர்கள். அவர்களுள் இளயா ராய் அண்ணும‰ செட்டியார் என்னும் பெயருடன் செப்புதற்கரிய சீர்த்திமானுய் விளங்குகின்றவர்களே நம் செட்டி நாட்டரசரவர்கள்.

இவர்கள், இளமைதொடங்கி, தங்களருமைத் தக்தையாரவர் களேத் தெய்வமாகப் பேணி '' தக்தைசொன் மிக்க மக்திரமில்ஃ'' என அவர்கள் சொல்லும் கல்வழிகளே உறுதியாகக் கொண்டு அவர்களுக்கு உதவியாகக் கணக்குக் காரியங்களே யெல்லாம் கவனித்துக் கை தேர்க்தார்கள்.

ணை வகறை த்துயிலெழு தல், தெய்வசிர் தணே செய் தல், கால த்தை த வீணுக்காமல் கருமமாற்று தல், மடியின் மையா திய கைக்கொண்டு ''ஊக்கமுடைமை யாக்கத் திற் கழகு'' என்னும் இலக்கணத் திற்கும்,

'' ஆக்கமிங் கொருவரா லணுக வேண்டுமேல் ஊக்கமுண் டாவரே லுறுவ`ரன்ன த கீக்கமில் கொள்கையி னிற்ப ரேயெனின் மேக்கு று பெருந்திரு விரைவின் மேவுமால் ''

என்னும், கச்சியப்ப சிவாசாரியாரவர்களின் திருவாக்குக்கும் சான்றுக அயரா ஊக்கமுடையராய்ப் பெருந்திருவாளராய்ப் பிறங்குகின்றுர்கள்.

" பினேக்கு விளக்கு மடவாள்" என்றுன்றேர் கூறியவாறு இவர்களின் புண்ணியப்பயளுகத் திருவினும் நல்லாளாகிய சிதையாச்சி யாரை மணந்து மணேயற மாட்சியை மாண்புடன் நடாத்தித் தமது தக்தையாரைப்போல நன்மக்கட்பேறு பெற்றுர்கள்.

மகனறிவு தந்தையறிவு என்ற முதுமொழிப்படி இவர்களின் தவப்புதல்வர்களான, முத்தைய செட்டியார், இராமசாமி செட்டியார், சிதம்பரம் செட்டியார் ஆகிய மூவர்களும் மகாமதியூகிகளாய் நற்குண நற்செய்கைகளிற் சிறந்து எடுத்த கருமத்தை எழில்பெற முடிக்கும் ஆற்றலுடையவர்களாய், தங்களின் அரும்பெறற்றந்தையாராகிய கனம் ராஜா அவர்களுக்கு உறுதுணேயாய் ஊக்கமும் ஆக்கமும் ஒரு சேச மந்திரி, மேயர் முதலிய பதவிகளேயும், சர் முதலிய பட்டங்களேயும் சந்ததி விளங்க நண்மைந்தர்களேயும் பெற்று விளங்குகின்றுர்கள். "பெண்டு வாய்க்கும் பிள்ளே வாய்க்கும் புண்ணியவானுக்கு பண் டம்வாய்க்கும் பணதிவாய்க்கும் பாக்கியவானுக்கு" என்ற பழ மொழியை கம் ராஜா அவர்களின் பரம்பரை உலகில் கிலேபெறச் செய்துளது.

ப்போக்களாதிய மாண்புடன் புகழுக்கு நிலேக்களமாக விளங்கும் செட்டி நாட்டரசரவர்களின் சிர்த்தி செப்புதற்கரியது.

கொண்டுவில கொடுக்கல் வாங்கல் தொழில்முறைகளே மிக்க மேன்மையாக நடத்திப் பொருளீட்டுக்துறையில் இவர்களுக்கு இவர் களே ஒப்பாவார்கள். இவர்களின் பேராற்றல் கருதியே அரசாங்க உரிமையுள்ள பொருட் சேமிப்பு நிலேயங் (Bank) களிலும் இவர்களேக் கவர்னராகக் கொண்டார்கள்.

ஏர்வ்வளவு பெரிய காரியமாயினும் எண்ணியவெண்ணியாங்கு இனிது முடிக்கும் ஆற்றலும், கல்வியுடைமை பொருளுடைமை எனு மிரண்டு செல்வமும் நிறையப்பெற்றும் ஒரு சிறிதும் செருக்கின்றிக் காட்சிக் கெளியாாய் இன்முகங்காட்டி இனியவை பேசுமெழிலும், இன்சைய்தாரை என்னயஞ் செய்தொறுக்கு மியல்பும், பரோபகாரப் பண்பும், பெருங் கொடையளிக்கும் பெருந்தகைமையும், கண்டவர் மனத்தைக் கணத்திற் பிணித்து எவ்வெவர் தம்மையும், கண்டவர் மனத்தைக் கணத்திற் பிணித்து எவ்வெவர் தம்மையும், கண்டவர் மடுத்துந் திறமையும், கணக்கறிந்து பயன்றரு சொற்களேயே நிறையுடன் கூறும் கேர்மையும், அடுத்தவரை யாதரிக்கும் ஆண்மையும், செல்விருந் தோம்பி வருவிருந்து பார்த்திருக்கும் செம்மையும், இடையரு முயற்கி யும், உஃயாது குற்றும் ஊக்கமும், வகைதெரிந்து முடிக்கும் வன்மையும் மிக்க இவர்களே.

'' மெய்வருத்தம் பாரார் பசிகோக்கார் கண்டுஞ்சார் எவ்வெவர் தீமையு மேற்கொள்ளார்—செவ்வி அருமையும் பாரார் அவமதிப்புங் கொள்ளார் கருமமே கண்ணுயி ஞர்.''

என்னும் வெண்பாவுக்குச் சான்றுக விளங்குகின்றுர்கள்.

மிகக் கூர்மையாகக் கணக்குகளில் வல்லுமராகலின் தமிழ்க்கணக் கெல் தேர்ந்தவர்களுக்குத் தக்க பரிசும் வழங்குகின்முர்கள்.

இத்தகு பெருமைவாய்ந்த உத்தமப் பெரியாரும் தனவணிக குல திலகருமாகிய செட்டி நாட்டாசாவர்களின் சீர்த்தி சென்னே மாகாணத்தில் மாத்திரமன்றி இப்பாதகண்டத்தும் எனேய கண்டங் களிலும் பாந்து விளங்குகின்றது.

' அறிவுடை யொருவணே அரசனும் விரும்பும்' என்ற பெரியார் மொழிப்படி இவர்களறிவின்றிறணே அரசியலாரறிக்து பாராட்டி இவர் களுக்கு ராவ்பகதூர், சர், ராஜா, டாக்டர் ஆதிய பட்டங்கள் வழங்கி அரசாங்க ரிர்வாக சபைகள் பலவற்றிலும் அங்கம் வகிக்கச் செய் தார்கள்.

சென்ணே மாகாணத்தில் ஏணேபோர்கள் செய்தற்கரியதான பெரியதோர் பல்கலேக் கழகத்தைத் திருவேட்களத் தெல்ஃவயில் நிறுவி, அதில் ஆங்கிலம், தமிழ், ஆரியம் ஆதிய பல கணேகளேயும், இங்கிதமான சங்கீதக் கணேயையும் இனிமையாக யாவரும் பயின்று இன்புறும் வண்ணம் இயற்றிய பெருமை இவ்வுலகமும் எவ்வுலகமும் போற்றுர் தாத்ததாம்.

இப்பெரிய நிலேயத்தை நிறுவியதனுல் இவர்களது போற்றலும், இதற்குப் பெரும் பொருளுதவியதனுல் இவர்களின் பெருந்தியாகமும், இப்பல்கலேக் கழகத்திற்குவேண்டும் வசதிகளுடன் பல கட்டிடங்களே அணியணியாக வமைத்துச் சாலேகள், சோலேகள், நீர் நிலேகள் தாராள மாக வுண்டுபண்ணி அண்ணுமலே நகராக்கிக் கண்கவர் வனப்புடன் காட்சியளிக்கச் செய்திருப்பதனுல் இவர்களின் அறிவாற்றலின் மாட்சி யும் யாவரும் போற்றற்குரியன.

"தோன்றிற் புகழொடு தோன்றுக" என்னுக் தேவர் திருவாக் கின்படி மன்னர் மன்னரும் மதிக்கும் புகழ்பெற்ற இவர் களின் தக்தையார் காலத்தில் செய்த சிதம்பரம் கோயில் திருப்பணி யில் கிலபாகம் வழக்கின் காரணமாக முற்றுப் பெருமலிருக்ததை இவர்கள் முன்வக்து அவ்வழக்குகளே பொழித்துத் திருப்பணியை முற்றுவித்து, கிவகாமிசேரும் தில்ஃலயம்பல வாணருமாகிய கடராஜ ராஜரையும், திருமகளுடனுறை கோவிக்தராஜப் பெருமாளேயும் ஒரே இடத்தில் நின்று நன்முகக் கண்டு தொழும்படி செய்த போற்றல் எல்லாரும் போற்றுக் தகையதும் இறைவரின் போருளுக் குரியது மாகும்.

பொது என்மைக்கு ரிய காரியங்கள் எவற்றையும் முடிக்கும் போற் றல் இவர்களுக் கிருக்கின்றமையால் '' இதணே இதனைவேண் முடிக்கு மென்று ஆய்ந்து அதணே அவன்கண் விடல் '' என்ற திருக்குறளின்படி அக்காரியங்களே இவர்களின் பாரமாகவே விடுவதும் இவர்களன்புடனு வந்து முடிப்பதும் இயற்கை. அவைகளுள் பர்மாப் பிரிவிண குறித்துத் தங்கள் சொர்தச் செலவில் சிமைக்குச் சென்று மாட்சிமை பொருந்திய சக்காவர்த்தியவர்களேப் பேட்டிகண்டும், பாராளு மன்றத்தில் எடுத்து மைரத்தும் காரியத்தைச் சாதித்து வந்ததும் ஒன்றுகும்.

செட்டி நாடென்பது தொண்ணூற்றூறார் நகரங்களேனத் தொன்று தொட்ட வழக்கேயாயினும் செட்டி நாடென்று ஓர் ஊர் உண்டா? என்று பலர் கேட்கவும் குறை கூறவும் ஏதுவின்றி 'செட்டி நாடு' என்று ஒரு நகர நிர்மாணஞ் செய்யக் காடுகொன்று நாடாக்கிக் குளக்தொட்டு வளம் பெருக்கிக் கோயிலொடு குடிநிறீஇ வாயிலொடு புழையமைத்து அணிபெறச் செய்யும் கனம் ராஜா சர் அண்ணுமலே யண்ணலாரின் செயற்கருஞ் செயல் யாவரும் வியக்கும் பான்மைய தாகும். ''செயற்கரிய செய்வார் பெரியர்" என்பது பொய்யாமொழி.

இவர்களின் செயற்கருஞ் செயல்களேயும் சிரின் சிறப்பையும் எடுத்து விளக்குவதரிது. இத்தாளும் இடம் பெருது. ஆதலின்

'' வையஙின் னகரிசெம்பொன் வடுகிரி நினது பீடம் வெய்யவ னினது தீபம் வேஃமஞ் சனரீர்ச்சாஃ செய்யவள் நினதுபாரி திங்கள்நின் கவிகை செவ்வேல் ஐயநின் பெருமையார்க்கு மளவிடற்கரிதே என்றுர்.''

என்னும் புராணச் செய்யுளேக்கூறி முடிக்கின்றேன்.

எல்லா நலனும் இடைய எழிலுடன் பிளிரும் எங்கள் செட்டி நாட்டாசாவர்கள் பிறந்த அறுபதாவதாண்டு நிறைவுமணம் காகுடுகாத் தானில் அவர்களின் மாளிகையில் மேலாம் கிசுவாண்டு கன்னித்திங்கள் பதினென்று (27—9—1941)† இக்கட்டுரை எழுந்தது.

திருவாழ் செல்வச் சிரியோராகிய இப்பெருந்தகைப் பெரியாரின் அறுபதாவதாண்டு நிறைவுமணம் இனி து நிறைவேறவும், உயர் ரலமும் உயர் குணமும் பொருந்தி மிளிர்கின்ற இவர்களும் இவர்களின் மணேவி மக்களாதிய வழித்தோன்றல்களும் பல்லூழி பல்லூழி வாழவும், இவர் களின் செல்வமும் சிரும் மென்மேல் ஒங்கவும், இவர்களின் நல்லறங் கள் யாவும் நாணுளும் வளரவும், இவர்களின் சீர்த்தி பல்கிப்பெருகிப் பாசெலாம் பரவவும், இவர்களின் பரம்பரை ராஜ பரம்பரையாக எந் நாளும் இனிது விளங்கவும் வேண்டுமென இவர்களின் குல தெய்வ மாக நித்ய கல்யாணியோடுறையும் கைலாயநாதரையும் வழிபடு தெய்வ மாகச் சிவகாமியம்மையோடுறையும் தில்ஃயம்பல வாணரையும் மன மாரச் சிந்தித்து வாயார வாழ்த்திப் போற்றுவோமாக.

[🕆] மூலநாளன்று நடைபெறும் மகிழ்ச்சிக்கு அறிகுறியாக.

பாரதியாரும் ஏணய பெரியாரும்

(S. Rudrapathiar, Maharaja's College, Mysore)

சமார் இருபதாண்டுகளுக்கு முன் நந்தண்டமிழ் நாட்டில் நந்தாப் புகழ் பெற்று வினங்கிய திரு. கி. சுப்போமணிய பாரதியாரைப் பற்றி அறியாதார் இர் நாட்டில் யாரும் இரார் என்று கருதுகின்றேன். உறங்கிக் கிடந்த தமிழரைத் தட்டி யெழுப்பிய தனிப் பெருமை அன்னுர்க்கு ரித்தாகும். இவரது பாடல்கள் கற்பார்க்கு எளிதில் பொருள் விளங்கக்கூடியனவாயிருக்கின்றன. நமது பைந்தமிழ் நாட்டில் தோன்றி நமது தமிழன்னேக்கு அழியாப் புகழ் தந்த நாவலர் பாவலர் முதலிய பெரியோர்கள் நூற்களில் காணப்பெறும் சீரிய கருத்துக்கள், பாரதியார் தம் பாடல்களில் நேரிய முறையில் பொன்மே போல் போற்றியுள்ள பான்மை படிப்போர் மனம் சுர்க்கும் பான்மைக்கு. அவற்றை இக் கட்டுரைமூலம் கிறிது ஆராயப் புகு கின்றேன். கலேத்துறை முற்றிய நலத்துறையாளர்கள் இக் கட்டுரை யில் குற்றம் கண்டுழி அதைப் பொறுத்துக்கொள்வார்களாக.

பாரதியார் நமது செர்தமிழ் மொழியில் மிகவும் ஈடுபட்டவர். மிகுர்த அன்புள்ளவர். '' பாஷாபிமானமே தேசாபிமானம்'' என்ற கொள்கையுடையார்.

> '' பெற்ற தாயும் மூறந்த பொன்குடும் கற்றவானிலும் கனி கிறந்தனவே ''

என்று பாரதியார் பறை சாற்றுகின்றுர். அவரே அவ் வாக் கிற்கு ஒர் சிறந்த எடுத்துக்காட்டாக விளங்கினர். இவர், தாய் மொழியார் தமிழன்ணயிடம் வைத்திருந்த எல்லேயில்லாத அண்பைப் போலவே, நமது பரதகண்டமாம் சரதமா தேவியிடமும் அளவற்ற அன்பு செலுத்தி வந்தார். இதைப்போலவே இறைவனிடமும் கிறைந்த அன்புள்ளவராகத் தெரிகிண்றது. இம்மூவகைப் பற்றைப் பற்றிச் சிறிது விளக்கமாகப் பார்ப்போம். இவர் செக்தமிழ் புலவர்களேப் பாராட்டு முறை கம் பாராட்டிற் குரியதாகும்.

> " கல்வி சிறந்த தமிழ்நாடு—புகழ்க் கம்பன் மிறந்த தமிழ்நாடு"

என்று, கல்வி வளம் பொருக்கிய தமிழ் காட்டில் கவின் புகழ் வாய்க்த கவிச் சக்காவர்த்தியாகிய கம்ப காட்டாழ்வார் தோன்றிய தமிழ்காடு என்று தமிழ் காட்டைப் புகழ்க்த பாரதியார்

'' வள்ளுவன் தன்னே யுலகினுக்கே தந்து வான்புகழ் கொண்ட தமிழ்நாடு— நெஞ்சை அள்ளும் சிலப்பதிகாரம் என்ளூர் மணி ஆரம் படைத்த தமிழ் நாடு ''

என்று தெய்வப் புலமைத் திருவள்ளுவனுரை, உலகத்திலுள்ள எல்லா மதத்தினரும் எல்லாக் குலத்தினரும் எக்காலத்தும் பயனுறும் வண்ணம் ஈன்றளித்துப் புகழ்கொண்ட ஈடில்லாப் பெருமை தமிழன் ணேக்குத்தான் உண்டு என்னும் கருத்துப்பட, பாரதியார் பாடியுள்ள அடிகளில் செறிந்து கிடக்கும் நயம் அறிந்தின்புறற்பாலது. கற்போர் நெஞ்சைக் கொள்ளும் கிலப்பதிகாரம் என்னும் ஒர் அழகிய மாலேயை நம் தமிழன்னே யணிந்துள்ளாள் என்று கூறியுள்ளார். பாரதியார் இம்மூன்று புலவர்களின் நூல்களில் தம்முள்ளம் தோயப்பெற்று அவற்றின்கண் காணப்பெறும் அழகெனும் வாரிதியில் மூழ்கித் திளே த்தவராதலால்,

" யாமறிந்த புலவரிலே கம்பணேப்போல் வள்ளுவர் போல், இளங்கோவைப்போல் பூமிதனில் யாங்கணுமே மேறந்ததிலே, உண்மை, வெறும் புகழ்ச்சியில்லே;

என்று கிறைக்த மொழிகளால் அப்புலவர் பெருமக்களேப் போற்றுவது காம் கவனிக்கத்தக்கது. பாரதிபார் ஆங்கிலம், வங்காளம் முதனிய வேற்று மொழிகளேயும் அவ்வம் மொழிகளில் உள்ள கவிகளேயும் கண் குணர்க்கிருத்தல் வேண்டுமென்பது கிழ்வரும் வரிகளாற் புலனுகன் றது. அவர் கம்மொழிப் புலவர்களே மேற்காட்டிய முறையில் புகழ்க்ததோடமையாது, '' யாம**றிந்த மொழிகளிலே** தமிழ்மொழி போல் இனிதா**வத** எங்கும் காணேம்''

என்ற தமிழின் தன்னேரில்லாச் சிறப்பிற்கும் இனிமைக்கும் சான்ற பகருசின்ருர். தமிழ் மொழி அமிழ்தம் போன்ற இனிமை வாய்ந்தது என்பது இவர்தம் கருத்தாகும். அதனைல்,

> '' தெள்ளுற்ற தமிழமுதின் சுவைகண்டார் இங்கமரர் சிறப்புக் கண்டார் ''

என்ற கூறியுள்ளார். ''தமிழ் விடுதூது'' ஆசிரியர் தமிழை இமை போர் தரு புத்தமிர்தத்தினும் இனிமையுள்ளதாக மதிக்கின்றுர் என்பது,

'' இருக்கமிழே ! யுன்னல் இருக்கேன் இமையோர் விருக்கமிழ்த மென்றுலும் வேண்டேன் ''

என்ற வரிகளால் விளங்குகின்றது. இன்னும் முற்றத் தூறந்த மாணிக்கவாசக சுவாமிகள் கூட,

'' தண்ணேர் தமிழனிக்கும் தண் பாண்டி நொட்டானே''

என்ற அடியில் தமிழ் குளிர்ச்சி பொருந்தியதென்பதைக் குறிக்கின் மூர். திருச்சிற்றம்பலக் கோவையில் பாங்கன் வினையும் துறையில்,

> '' சிறைவான்புனல் தில்ஃிச் சிற்றம்பலத்தும் என் சிக்தை யுள்ளும் உறைவான் உயர்மதிற் கூடவின் ஆய்க்த ஒண்தீக் தமிழின் துறைவாய் நுழைக்கணயோ, அன்றி ஏழிசைச் சூழல்புக்கோ இறைவா! தடவரைத்தோட் கென்கொலாம் புகுக்தெய்தியதே''

என்ற பாசுரத்தில், தஃவேன் உடல் மெளிவுக்குச் சங்கத்தமிழின் இனிமையில் தோய்க்து, இயற்றமிழ் பயின்ற காரணமோ வென்றும், அன்றி இசைத்தமிழில் ஈடுபட்டு அதில் தோய்க்த காரணமோ வென் அம், பாங்கன் கேட்பதாகச் செய்யுள் செய்துள்ள நமது வாதவூரடிகள் தமிழ்மொழியில் எவ்வளவு அன்புடையவராயிருத்தல் வேண்டும் என்பது தெற்றெனப் புலனுகின்றது.

உம்பரும் போற்றும் கம்பகாட்டாழ்வார், தமிழ் மிகவும் இனிமையுடையதென்றும், ஒருவர் தமிழின் இனிமையில் ஈடுபட்டால் வேரெரு காரியத்திலும் மனம் செலுத்தார் என்றும் கூறுவது இவண் கருதத் தக்கது. சுக்கிரீவன், சொல்லின் செல்வனுகிய அனுமனுக்கு இலங்கை செல்லும் வழி கூறும்போது,

'' தென்றமிழ்நாட் டகன் பொ திமில் திருமுனிவன் தமிழ்ச் சங்கம் சேர்கிற் பீரேல் என்றுமவண் உறைவிடமாம் ஆதலிஞல் அம்மீல்மை இறைஞ்சி பேகிப் பொன்திணிந்த புனல் பெருகும் பொருகை யெனும் திருநதி பின் பொழிய நாகக் கன்றுவளர் தடஞ்சாரல் மகேந்திரமாம் செடுவரையும் கடலும் காண்பீர்''

என்று கூறியிருப்பதால் கம்பரின் கருத்து வெளியாகின்றது.

அடுத்தபடியாக ஈமது பாரதியாரின் ஈாட்டுப்பற்றைப்பற்றிச் சிறிது ஆராய்வோம். ''பாப்பா'' என்ற பாட்டில் அவர் தாய் நாட்டைப் போற்றுவது கவனிக்கத்தக்கது.

> '' தமிழ்த் திருநாடு தன் ஊேப்பெற்ற—எங்கள் தாயென்று கும்பூடடி பாப்பா அமிழ்தில் இனியதடி பாப்பா—கம் ஆன்ளூர்கள் தேசமடி பாப்பா'' '' செல்வம் நிறைந்த ஹிந்துஸ்தானம்—அதைத் தினமும் புகழ்ந்திடடி பாப்பா சேதமில்லாத ஹிந்துஸ்தானம்— இதைத் தெய்வமென்று கும்பேடி பாப்பா''

என்ற வரிகளில் பாரதியாரின் நாட்டுப்பற்று கன்கு புலனுகின்றது. மிக எளிய நடையில் கற்போர் மனத்தில் பசுமாத்தாணிபோற் பதியும் வண்ணம் எழுதியிருக்கின்றுர். இளங்குழக்தைப் பிராயத்திலேயே காட்டுப்பற்று ஈம் குழக்தைகளுக்கு ஏற்படவேண்டுமென்பது இவர் கருத்து. அதலைத்தான் இறு பிள்ளேகளுக்காக எழுதிய ''பாப்பா'' என்ற பாட்டில் இங்ஙணம் கூறியுள்ளார்.

நாம் வாழ்ந்து வரும் நாட்டை நாம் போர்றுதல் தஃவாய கடன் என்று பாரதியார் தெரிவிக்கின்றுர். வாயிஞல் மாத்திரம் 'வந்தே மாதரம்' என்று கூறிவிடுதல் நாட்டினிடம் பற்று செலுத்தியதாக ஆகாதெண்றும், நம் நாட்டு வழை மக்கள் படுந்துயரம் கண்டு இரக்கங் கொண்டு, அன்னுர்க்கு ஆவனபுரிதல்தான் நாட்டினிடம் அன்பு செலுத் தம் முறையென்றும் பாரதியார் கருதுகின்றுர் என்பது கீழ்வரும் பாக் களால் தெரிகின்றது.

> " சொந்தச் சகோதரர்கள் துன்பத்தில் சாதல்கண்டும் சிர்தை பிரங்காரடீ.——கிளியே செம்மை மறர்தாரடீ." " தாயைக் கொல்லும் பஞ்சத்தைத் தடுக்க முயற்சியுருர் வாயைத் திறர்து சும்மா.—கிளியே வர்தேமாதரம் என்பார்"

என்ற நடிப்புச் சுதேகிகள் என்ற பாக்களில் தேசத்தை வணங்கும் முறை நண்*ரு*கக் கூறியுள்ளார்.

> '' ஏதமிலா இன்சொல் மரகதமே ஏழ்பொழிற்கும் நாதனமை யாளுடையா கூடுரையாய்—காதலவர்க்கு அன்பாண்டு மீளா அருள்புரிவா கூடென்றும் தென்பாண்டி நாடே தெளி''

என்று வாதவூரடிகள் திருத்தசாங்கத்தில் அருளியுள்ளார். அடிகள் அவதரித்த தென்பாண்டி நாட்டைச் சிவபெருமானது திருநாடென் கின்றுர்.

- " திருவம்மானே" யென்றும் பகுதியில்
- " அப்பாண்டி நாட்டைச் சிவலோக மாக்குவித்த அப்பார் சடையப்பன்" என்றும்,
- ு தென்⊚ணேக் காவாணேத் தென்பாண்டி நாட்டாணே ''

என்றும், ஈமது ஆளுடைய அடிகள் திருவாய் மலர்க்கருளி யிருப்பதி விருக்து, தாம் திருவவதரித்த பாண்டி காட்டைப் போற்றும் முறையும்,

> " தென்ணுடைய சிவனே போற்றி எ**ந்நாட்டவர்க்கும் இறைவா** போற்றி"

என்ற அடிகளால் பாண்டி நாட்டைத் தன்பாலுள்ள தென்னுட்டார்க் குரிய சிவனே போற்றி என்றும், அதே சிவன் எல்லா நாட்டார்க்கும் இறைவனுய்த் திகழ்கின்றுன் என்றும், நாம் கூர்ந்து கவனித்தால் அடி களுக்குப் பொதுவாகத் தான் பிறந்த தென்னுட்டிலும், சிறப்பாகப் பாண்டி நாட்டிலும் எத்தகைய அன்பு இருந்தது என்பது விளங்கும்.

இனி பாரகியார் இறைவணிடம் வைத்த எல்லேயற்ற அன்பை ஒரு சிற்து ஆராய்வேரம். இவர் இர்து மதத்தில் ஒன்ருகிய சாத்த மதத்தைச் சார்ந்தவர். காளியின் கருணே வாய்க்கப் பெற்றவர். முருகப்போண முமுமனதுடன் போற்றுகின்ருர். எல்லாத் தெய்வங்களேயும் இனிது ஏத்துகின்றுர். சமாச ஞானம் கைவாப் பெற்றவராகத் தெரிகின்றது.

முருகணே மனமுருகும் வண்ணம் பாரதியார் பாடிய பாட்டு மிக வும் பத்திச் சுவை சொட்டக் கூடியதாகும்.

முருகா—முருகா—முருகா

வருவாய் மபில் மீதினிலே வடிவே லுடனே வருவாய் தருவாய் நலமுந் தகவும் புகழும் தவமும் திறமும் தனமும் கனமும்—என்று

கூறப்பெறும் பகுதியில் முருகணே,

- " முடியா மறையின் முடிவே, அசுரர், முடிவே கருதும் வடிவேலவனே ''
- '' சுருதிப் பொருளே வருக தாணிவே கனலே வருக கருதிக் கருதிக் கவிலப் படுவார் கவிலக் கடிலேக் கடியும் வடிவேல்'' 127

என்ற வரிகளில் எவ்வளவு அரிய கருத்துக்களே வெளியிட்டுள்ளார். அடியார்களின் மனக்கவலேயை ஆண்டவண் போக்குகின்றுன். இறை வணே வணங்காதார் தம் மனக்கவலேயை மாற்ற முடியாது என்பது,

> '' தனக்குவமை பில்லாதான் தாள்சேர்ந்தார்க் கல்லால் மனக்கவூல மாற்ற லரிது ''

என்ற வள்ளுவர் வாய் மொழியால் விளங்குகின்ற தண்றே? இதே கருத்தைப் பாரதியார் தம் நூலில் நன்கு தெரிவிக்கிண்முர்.

இன்னும் அதே பாட்டில்

'' அறிவாகிய கோமிலிலே அருளாகிய தாய் மடிமேல் பொறிவேலுடனே வளர்வாய் அடியார் புதுவாழ் அறவே புவிமீ தருள்வாய்''

என்ற வரிகளில் உள்ள நயம் நாம் ஓர்க்தின்புறற் பாலது. இறைவன் அறிவு பிளைக்கம் உள்ள இடத்தில், கரு‱ நிறைந்த இடத்தில், பிளெங்கு கின்றுன் என்ற உண்மையைப் பாமதியார் இங்கே தெரிவிக்கின்றுர்.

''சத்தாகி பென் சித்த மிசை குடிகொண்ட அறிவான தெய் வமே'' என்ற தாயுமான சுவாமிகளின் திருவாக்கு இங்கு ஒப்பு கோக் கத் தக்கது.

கல்வி யறிவு விளக்கமற்ற கெஞ்சில் ஆண்டவன் தங்குவதில்லே யென்ற உண்மையைக் ''கல்லாதார் கெஞ்சில் நில்லா ஈசன்'' என்ற அருமைத் திருவாக்கால் நன்கறியலாம்.

ஆறு துணே பென்னும் பாடலில்

'' வெற்றி வடிவேலன்—அவனுடைய வீரத்தி'னப் புகழ்வோம் ; சுற்றி நில்லாதே போ!—பகையே தோள்ளி வருகுது வேல்''

என்ற வரிகளே வாசிக்கும் போதே வீரவுணர்ச்சி ததும்புகிற தல்லவா? அத்துடன் வேலாயுதம் துள்ளி வருவது போல் ஈம்மனக் கண்முன் தோன்றுகின்றது. முருகனது வேலாயுதம் அடியார்களது அகப்பகையையும் புறப்பகையையும் ஒருங்கே கொல்லும் என்பது பாரதியார் துணிபாதலால் பகைக்கு எச்சரிக்கை கொடுப்பார் போல "முருகன் வீரவேல் துள்ளி வருகின்றது, ஒடிப் பிழைத்துப் போ" என்று சொல்லுகின்ற அழகை காம் ஒர்வோமாக.

> " அஞ்சுமுகர் தோன்றில் ஆறுமுகர் தோன்றும் வெஞ்சமரில் அஞ்சலென வேல்தோன்றும் —கெஞ்சில் ஒருகால் ரீனேக்கில் இருகாலும் தோன்றும் முருகா என்ளுதுவார் முன்"

என்றருளிய நக்கீசர் திருவாக்கு இவண் நிணேக்கத் தக்கது. கொடிய போரில் பகைவருக்காக அஞ்சவேண்டா மென்று வேலாயுதம் தோன் றும் என்கின்முர். இக்கருத் தொற்றுமை பாசதியார் பாசுசத்தில் கண்டின்புறுவோமாக.

> '' ஆஹசு்டர் முகங்கண்டு விழிக் கின்பமாகுதே—கையில் அஞ்சலெனுங் குறிகண்டு மகிழ்ச்சி யுண் டாகுதே''

என்ற அடிகளில் பாரதியார், மாக்கர் கண் பெற்ற பயன் இறைவணேக் காணுதல் என்றும், அங்ஙனம் காணின் விழிக்கின்பம் உண்டா கென்ற தென்றும், அபயகரத்தைப் பார்த்ததும் பிறவிப் பயம் ஒழிக்து ஆனக்தம் உண்டாகின்றது என்றும் கூறப்பட்டுள்ள கருத்து கம் உள்ளத்தைக் கொள்ளே கொள்ளுகின்றது.

இங்கே,

"கண்கோள், காண்மின்களோ கடேல் நஞ்சண்ட கண்டன் தன்கு "'

என்றருளப் பெற்ற ஆளுடைய அரசின் திருவாக்கு கருதத்தக்கது.

தேசமுத்து மாரி என்ற பாட்டில்,

'' ஆதாரம் சக்கி யென்றே அருமறைகள் கூறும் யாதானும் தொழில் புரிவோம் யாதுமவள் தொழிலாம் '' என்று கூறியுள்ள வரிகளில் கில அரிய கருத்துகளேப் பார்ப்போம். சக்தி தான் உலகிற்கு மூலாதாரம் என்று பெரியோர்கள் கூறுகின்றனர். அதையே இவரும் கூறியுள்ளார். எத்தொழில் செய்யினும் இறைவி யின் தொழிலாகும் என்கின்முர். அவனன்றி யோரணுவும் அசையா தெனும் ஆப்தர் மொழியின் உண்மை இவர் வாக்கில் காணப் படுகின்றது.

> '' துன்பமே மியற்கை யெனும் சொல்லே மறந்திடுவேம் இன்பமே வேண்டி நிற்போம் யாவுமவள் தருவாள் ''

என்ற பாட்டில் '' இன்பமே யெர்காளும் துன்பமில்லே'' என்னும் அப் பர் பெருமான் கருத்து பிரதிபலிப்பதைக் காணலாம்.

பாரதியார் சக்தியிடம் வரம் கேட்பதை யாராய்வோம். கேட்பன - என்ற தஃப்பின்கீழ்க் கூறுவது

" நல்லதோர் வீணே செய்தே — அதை
நலங்கெடப் புழுதியில் எறிவதுண்டோ?
சொல்லடி சிவசக்தி — எணேச்
சுடர்மிகு மறிவுடன் படைத்து விட்டாய்
வல்லமைதாராயோ இந்த
மாநிலம் பயனுற வாழ்வதற்கே?
சொல்லடி சிவசக்தி — நிலச்
சுமையென வாழ்ந்திடப் புரிகுவையோ?
விசையுறு பந்தினேப்போல் — உள்ளம்
வேண்டியபடி செலும் உடல் கேட்டேன்
நசையறுமனம் கேட்டேன் — நித்தம்
தசையியுமை கெல்லகங் கேட்டேன்
அசைவறுமதி கேட்டேன் — இவை
அருள்வதில் உனக்கேதுந் தடையுளதோ? என்பதாகும்."

கிடைத்தற்கரிய மானிடப்பிறவியை யெடுத்த ஒவ்வொருவரும் பிறருப காரத்திற்காகப் பாடுபடவேண்டும். இன்றேல் ஒர் நல்ல வீணே செய்து புழுதியில் எறிவதொக்கும் என்கின்றுர். மாரிலம் பயனுற வல்லமை வேண்டுமென்கின்றுர். மாநிலத்து மார்தர் நன்மை கரு தி யுழைத்தால் இன்பம்தானே வர்துசேரும் என்பது அவர் கருத்து. இங்கு '' அன் பர் பணிசெய்ய வென்னே ஆளாக்கி விட்டுவிட்டால், இன்பநிலே தானே வர்தெய்தும் பராபாமே '' என்றருளப் பெற்ற தாயுமான சுவாமிகளின் வாக்கு நினேவுக்கு வருகின்றது.

'' எசையறுமனம் கேட்டேன்'' என்ற அடியின் நயம் அறிந்தின் புறவேண்டும்.

நசையற்றமனம் இருந்தால் இறையருள் கெட்டுமென்பது பெரி யோர்கள் கருத்தாகும்.

- '' பற்றற்ற கண்ணே பரம்பொருள் தோன்றும் ''
- ''அற்றது பெற்றெனில் உற்றது வீடு''
- '' பற்றற்ற கண்ணே சிறப்பறுக்கு மற்று ஙிலேயாமை காணப்படும் ''

என்ற சிரிய வாக்குகளின் கருத்துட்கொண்டு தனக்கு ஈசையறுமனம் வேண்டுமென்கின்றுர். கைம்மாறு வேண்டாக் கடப்பாடு மேன்மை யுடைத்தென்ற கருத்துள்ளவர். இக்கருத்தைப் பகவத்கேறையில் பக வான் ஒரு காரியத்தைப் பலனெதிர்பாராது செய்யவேண்டு மென்கின் மூர். இதை கிஷ்காமியம் என்றும் பெரியோர்கள் சொல்லுவார்கள்.

> '' தசையி'னத் தீசுடினும் சிவ சக்தியைப்பாடு மல்லகங் கேட்டேன் ''

என்றவரிகள் பாரதியாரின் தீவிர பக்தியைக் காட்டுகின்றது. இங்கே குலசேகரப் பெருமாள் அருள்வாக்கு நிணேவுக்கு வருகின்றது.

> ் வாளா லறுத்துச்சுடினும், மருத்துவன்பால் மாளாத காதல் கோயாளன்போல், மாயத்தால் மீளாத்துயர்தரினும் வித்துவக் கோட்டம்மா நீ ஆளாவுனதருளே பார்ப்பனடியேனே"

என்ற பாசுரத்தின் கருத்து, பாரதியாரின் வாக்கில் தொனிப்பதை காம் அறிந்து மகிழ்வோமாக.

பாரதியார் மஹாசக்தி பஞ்சகம் என்னும் கூலப்பின்கீழ்,

" கரணமுந்தனுவும் கினக்கெனத் தந்தேன் காளி நீ காத்தருள் செய்யே மரணமும் அஞ்சேன் நோய்களேயஞ்சேன் மாரவெம் பேடினேயஞ்சேன் இரணமும் சுகமும் பழியும் நற்புகழும் யாவுமோர் பொருளெனக் கொள்ளேன் சரணமென்றுனது பதமலர் பணிர்தேன் தாயெவேக் காத்தலுன் கடனே''

என்ற கூறியுள்ளதைச் சிறிது ஆராய்வோம். இச்செய்யுளில் மணி வாசக சுவாமிகளின் அணிவாசகமாகிய திருவாசகத்தில் காணப்பெறும் அரிய கருத்துக்கள் காணப்பெறுகின்றன. '' அன்றே யென்றனைகி யும் உடலும் உடைமை யெல்லாமுக், குன்றேயணயாய் ஃ ஆட் கொண்டபோதே கொண்டிஃயோ'' என்ற வரிகளில் உள்ள கருத்து, ''காணமும் தனுவும் நினக்கெனத் தந்தேன்'' என்றவரியில் காணப் படுகின்றது. '' மாணமும் அஞ்சேன் நோய்களேயஞ்சேன்'' என்பதன் கருத்திண் '' பிணியெலாம் வரினுமஞ்சேன் பிறப்பிதேஷைறப்பு மஞ் சேன்'' என்ற திருவாசக அடியோடு ஒத்துப்பார்க்க வேண்டும், '' மார வெம்பேயிண யஞ்சேன்'' என்பதின் கருத்து '' வளக்கையார் கடைக்க ணஞ்சேன்'' என்றவரியில் பிரதிபலிக்கின்றது. '' இரணமும் சுகமும் பழியும் நற்புகழும் யாவுமோர் பொருளைனக் கொள்ளேன், சாண மென்றுனதை பதமலர் பணிந்தேன் தாயெவக்காத்தலுன் கடனே'' என்ற வரிகளில் '' தகைவிலாப் பழியுமஞ்சேன்'' என்ற திருவாசகத்

> '' உற்றுரை யான்வேண்டேன் ஊர்வேண்டேன், பேர்வேண்டேன் கற்றுரை யான்வேண்டேன், கற்பனவும் இனியமையும் குற்றுலத் தமர்ந்துறையும் கூத்தா உள் குரைகழற்கே கற்றுவின் மனம்போலிக் கசித்துருக வேண்டுவனே''

என்ற திருவாசகத்தின் கருத்தும், காணப்பெறுவதைக் கண்டு களிப்போமாக. வி நாயகர் நாள்மணிமாலே என்ற தஃப்பின்கிழ்ப் பாரதியார் செய் துள்ள ஒரு செய்யுளே கோக்குவோம்.

> '' தவமேபுரியும் வகையறியேன் சலியாதுற கெஞ்சறியாது சிவமே நாடிப் பொழுதனேர்துர் தியங்கித் தியங் கிரிற்பேணே நவமாமணிகள் புணர்தமூடி நாதா கருஹலையனே, தத்துவமாகியதோர் பேரணவமே, ''அஞ்சேல்'' என்று சொல்லுதியே''

இச்செய்யுளோடு திருவாசக அடியாகிய

'' தவமேபுரிக்திலன் தண்மலரிட்டு முட்டா திறைஞ்சேன் ''

என்பதையும், திருவருட்பா வடியாகிய

" தவமேபுரியும் பருவமிலேன் பொய்ச்சக்கடைக்கண், அவமேபுரியும் அறிவிலியேனுக் கருளுமுண்டோ ''

என்பதையும்,

'' வெஞ்சேலின்ய கண்ணூர்தம் வெகுளிவில்யி லகப்பட்டு கைஞ்சேன் நாயேன் ஞானச்சுடரே நாஞோ் துணேகாணேன் பஞ்சேரடியாள் பாகத்தொருவா, பவளத் திருவாயால் ''அஞ்சேல்'' என்ன ஆசைப்பட்டேன் கண்டாயம் மானே''

என்னும் பாசுரத்தையும் ஒத்து கோக்கினல் நம்முன்னேர் கருத்துக் களேப் பாரதியார் பொன்னேபோல் தன்பாடல்களில் பொதிர்து வைத் தமை நன்குபுலனும். செட்டி காட்டரசரும் அண்ணுமலே ஸர்வகலாசாலே ஸ்தாபகரும் ஆன ஆரைமில் திவான் பஹதூர் டாக்டர் ராஜா ஸர் அண்ணுமில் செட்டியாரவர்களது சஷ்டியப்தபூர்த்தி யன்று புலியூர், கோடம்பாக்கம் வேத ப்ரவசன மந்திரத்தலேவரும், தமிழில் ரிக்வேதம், மான ஸோல்லாஸம், ஸௌந்தர்யலஹரி, சத்திரிபாதக் கோவை முதலிய நூல்களினைசிரியருமான

சிவத்தியானுநந்த மஹர்ஷி பாடியளித்த

வாழ்த்துப்பா.

24 fis sif 654 d.

ககாத்தார் தவப்பயனுய் காடதனின் முன்னேற்றம் நலக்க வெண்ணும் கற்குடிக்க ணவதரித்து காணயமே வைசியர்தம் நன்மைக் கேது நாடிடி*னென் றிரங்கோனின்* வங்கி*த*னில் நவ*நெறிச்சிர்* நாட்டு **வி**த்தோய்! <u>காங்களுன தறிவு நணுக் கம்முணர்க்துங்</u> கிழவனிவன் ஞானத் தென்றே சகமெச்சுஞ் சதுர்படைத்த வுன்ணேமதித் தறியோமாய் வயதான் மூத்த தன்மையது வெனவெண்ணி யேமார்தோம் ! அறுபடு ! உன் சால்பு மென்னே ! சருவகலா சாஃயொன்றித் தமிழகத்து நிலவவென*த் த*ீமை சாரத் தன்பெயரே கொண்(டு) அதனே த் தன்**பெயரா** லான நகர் தனிலமை த்தோய்! இகமு*ற்ரு*ர்க் கெழின்மூலம் கல்வியே யாகுமென வெண்ணி யோங்கும்

எங்கள்புலி முனிகடங்காண் பதியேற்ற முறகிறுவி யெழிலார் கீர்த்தி யின்பமதைப் பெற்றீனயென் றதுவொன்றே! எம்போல்வார்க் கெல்லாக் கோலும் எண்ணியு மெண்ணுமலும்கீ யீத்துவக்கும் வள்ளன்மை யியம்பப் போமோ? தகவுற்ற செட்டிகாட் டாசே! உன் தண்ணளியைத் தக்கோர் சொல்வார்; தபைபொறுமைச் சான்றுண்மை டாக்டரெனச் சார்புலவ! அரசு சென்னுக் தக்ககுடிப் பட்டமதை வழிவழியாச் சாருற்றுய்! ஐய! கிற்குச் சகலசுக மங்கலங்கள் பல்லாண்டு பல்லாண்டாய்த் தழைக்க கண்கே.

வாழ்த்துப் பாட்டு

Rao Sahib V. P. Subramania Mudaliar, G.B., V. C.

அறப தாண்டு கிறைவுற்ற அண்ணு மீஃப்பே ராசர்பிரான் உறுதி பயக்கும் தனதுபெயர் உற்ற உயர்பல் கீஃக்கழகம் கிறுவி உயர்வொப் பற்றபுகழ் கிஃக்கப் பெற்றேன், உடல் கலமும் மறுவில் பிறபல் கலமீனத்தும் மருவி வாழி கீடூழி.

வெ. ப. சு.

பூஞ்சோலே

(Vidwan, G. Subramania Pillai, M.A., B.L.)

இரகம்-சகாற

'('' எனதையாப் பழனிமலே வேலா '' என்ற டெட்டு)

- பண்ணிற் பணேத்தகவிச் சிறகால் உணேப் பறந்து விரைந்தெடுத்துச் செல்வேன் கண்ணே பொருணாதிக் கரையில் — அங்கே கண்ணேப் பறிக்குமொரு சோலே.
- பாலோ வெனப்பொழியும் நிலவில் சோலேப் பளிங்கைப் பழித்தாடுச் சுணேயில் ஆலோ சணேகள்மிக மூண்டு — அல்லி அன்பர் வருகைதணே நேடும்.
- அல்லீ நிணப்பதென்னே வென்ருல் பகல் அணேர்து சுகித்தவென்றன் மாரன் புல்விப் பொருர்தாது நிலவில் — கடல் புகுர்து மறைர்ததேனே வென்னும்.
- 4. கொஞ்சித் தினே த்துவினே யாடி நீலம் கோடி மீணவானிற் காணும் மிஞ்ச மணக்குமலர் ரோஜா — காதில் மெல்ல மறைந்துகதை பேசும்.
- 5. பிச்சு இருவாட்சு கொன்றை முல்லே பின்னு முள்ளபல மலர்கள் பச்சை சிவப்புவெண்மை மஞ்சள் — பல பரம னருளொளியைக் காட்டும்.

- 6. விரித்த இதழ்களிடை மலரில் மணம் விளேக்கும் புதுமைத‱க்கண்டு சிரித்து மகிழாத செஞ்சம் — சிவன் சீல முணர்வதுண்டோ பாரில்.
- 7. குமுத மலரினெளி கண்டு மதி குனிர்து குலவமனம் நாடும் அமுதம் பொழியுர்தன் காத்தரல் — அதை அன்பாய் மணந்தங்கே கூடும்.
- போன திசையெல்லாம் பூவை மனம் போன படியுழக்குங் காற்றும் கான வொலியைரீரிற் கேட்டு — ஒடைக் கரையிற் கரைக்துருகி நிற்கும்.
- அந்தக் கரையருகே மதியின் கீழ் அந்த விதமென்மனங் குழைய நந்த வனங்கள் சுற்றி வந்து — நாமும் நந்தாத இன்பம்வினேத் திருப்போம்.

(பண்ணிற்)

⁽Adapted and enlarged from Heinrich Heine's "Auf Flugeln des Gesanges" or "On the Wings of Melody.")

பெருமை தங்கிய டாக்டர் செட்டி நாஜா ஸர். அண்ணுமஃல செட்டியாரவர்கள் அறுபதாம் ஆண்டு நிறைவுவிழாவில் அண்ணும**ஃலப்** பல்க°லக்கழகத்தமிழ் விரிவுரையாளர்

வித்வான் G. சுப்பிரமணிய பிள்ளே M.A., B.L., பாடிய

வாழ்த்து.

- அண்ணு மஃயானே யார்வமுடன் கல்வி தனே எண்ணும் லீத்தளித்த ஏக்தலே — விண்ணுடாய்த் தில்ல வெளியைத் திருத்தியிட்ட தீரண வெல்லத்தான் வேக்துண்டோ வேறு.
- பொன்னேக் கொடுத்துப் புகழெய்தித் தாங்கழிவார் அன்ணேயார் தீர்தமிழுக் காதரமாய் — மன்னுங் கலேயளித்த சேவகா கண்ணே கிதையா நிலகளித்துப் பெற்றணேயே கீ.
- கீ தமும் பாட்டுங் கௌபொலி நற் கல்விகளும் வேதனும் வெள்கிடும் விஞ்ஞான — வோதைகளும் அண்ணு மலே நகரி லண்ணலே நின்னிசையென் றெண்ணுருஞ் சொல்வ ரிசைந்து.
- 4. பொட்டல் வறுங்களமும் போதரும்பிப் பூத்தளிக்கத் தொட்டது பொன்ஞர் துரையேகின் — னிட்டமகன் எத்திசையும் போற்ற வினும்பெறுவன் முத்தையா சித்தங் களித்திடுகற் சீர்.
- 5. முப்பா னிரட்டி முதுமைய தாகுமென லொப்பாமோ சால வுரவோய்கீ — எப்போதும் இப்போதே போல வினிதாக வாழ்க்திடுக அப்பாலுஞ் + செய்யும் அருன்.

^{*}பால்----ஊழ்

தமிழ்நூல் வளர்ச்சியும் ஆராய்ச்சியும்

(Prof. K. Subrahmanya Pillai, M.A., M.L.)

தமிழின் தொன்மையிணயும் சிறப்பையும் பல தமிழறிஞர்கள் எடுத்துப்பேசியும், தமிழை வளர்த்தற்குரிய தனிப்பெருங் கல்விகில யம் இப் பல்க‰க் கழகமென்று பல போறிஞர்கள் விதர்தோதியும் இன்னும் தமிழ்மொழி ஆக்கம்பெறுதற் குரிய முயற்சிகள் சிறர்து கிகழாமைக்குக் காரணம் உண்மைத் தமிழ்ப்பற்று, தக்க தமிழர் உள்ளத் தில் வேரூன்முமையே யாகும். தமிழ்மொழி உலகிலுள்ள எல்லா மொழிகளினுக் தொன்மையான உயிர்வாழு மொழியென்று இலங்கை உயர்திரு. ஞானப்பிரகாசப் பாதிரியார் கூறியுள்ளார். அவர் ஏறக் குறைய எழுபது மொழிகளோடு தமிழை பொப்பிட்டுப் பார்த்து வெளி யிடக்கரு திய நூல் வெளிவரு தற்குப்போ திய பொருளு தவுவார் இனி த் தான் தோன்றுதல் வேண்டும். காலஞ்சென்ற உயர்திரு. பா. வே. மாணிக்க ராயக்கர் அவர்கள் தமது அரிய ஆராய்ச்சித் திறனுல் உலகி லுள்ள பேச்சொலிக் குழாங்கள் அ*ணே த்*திற்கும் மூலமான மு*த*லொலி களும், அவற்றேடு கலந்து கலப்பொலிகள் எழுவதற்குப் பயன்படும் சார்பொலிகளும் தமிழிலே உண்டெனக்கண்டு அவற்றினுதவியால் எம் மொழிபையும் எழுதிவிடலாம் என்று சின்னுட்குமுன் கிலகாட்டினர். அம்முறை உலகவழக்கில் ஊக்கம்பெறுது போயிற்று. அதண உயிர்ப் பித்துப் பாவச்செய்தல் தமிழ்க்கல்வி கிலேயங்களின் முதற்கடமையாம். போலீஸ் இலாக்காவில் உயர்பதவி தாங்கி இப்பொழுது ஆறுதல் பெற்றிருக்கும் திருவாளர். M. S. இராமசாமி ஐயர் அவர்கள் தமிழ் மொழியோடும் தமிழ் நூற் கருத்துக்களோடும் ஐரோப்பிய மொழிகட்கு உள்ள தொடர்பிணப் பல்லாண்டுகளாக ஆராய்க்கு கண்டிருக்கும் முடிபுகளேச் சோதித்துப் பயனுள்ளவற்றைத் தொகுத்துப் போற்று தற்குரியவர்கள் யாவ*ொன்று* விளங்கவில்லே. அவ்வேலே விரைவில் தொடங்கப்பெற வேண்டும். சென்ற ஐம்பதாண்டுகளாக இர்நாட்டு இதிகாசங்களேயும், மேணே நாட்டு இதிகாசங்களேயும் ஒப்பிட்டுக் கற்று இந்து-ஐரோப்பியரின் (Indo-European) தோற்ற மூலத்தைப்பற்றி

விரிவாக ஆராய்க்து எழு திய பெரு நூலொன்று கின்றைட்கு முன் வெளி வக்தது. அகன் ஆகிரியர் தாகில் தாராயிருக்கு விடு தி பெற்றிருக்குக் திருகெல்வேலித் திருவாளர் சொக்கலிங்கம் பிள்ளே என்பார். அவர் இன்னும் கில பெரும் புத்தகங்கள் வெளியிடு தற்கு வேண்டும் கருத்துக் குறிப்புகளேத் தாம் தொகுத்து வைத்திருப்பதாகச் சொல்றுகின் றனர். அவற்றை அச்சூர்தி ஏற்று தற்குப் பொருள் முட்டுப்பாடு தடை செய்வது என்கின் றனர்.

இவ்வகையான முயற்கிகளெல்லாம் செல்வர்கள் ஆதாவு பெற்ற பெருங்கல்விரியேயங்களிலேதான் நிலேயாக நடைபெற்று வளர்க்தோங்கு வதற்குரியன. இந்நாளில் தமிழின் ஆக்கத்திற்காக வமைந்துள்ள பெரு நிலேயம் அண்ணுமலேப் பல்கலேக்கழக மொன்றே யாகும். உயர்தாத் தமிழ்க்கல்வி பயிற்று தலேயும் தமிழ்நூல் ஆராய்ச்சியை ஊக்கு வதையும் அதுமேற்கொண்டிருப்பது யாவரும் அறிந்த செய்தியாம். தமிழ்ப் புலவர்கள் ஆசிரியப் பயிற்சி பெறுதற்கும் அதன்கண்ணேதான் இட மமைந்துள்ளது. தமிழ்நூல் வளர்ச்சியும் ஆராய்ச்சியும் விரிவாக இனி தோங்கி என்றும் நின்று நிலேபெறுதற்குப் பல செல்வர்கள் உதவிபுரிய முன்வருதல் வேண்டும். தமிழ்நாட்டிலுள்ள அறநிலேயங்களும் ஆதி னங்களும் தமிழ்த் தொண்டின் விரிவாகவும் உறுதியாகவும் மேற் கொள்ளுதல் வேண்டும். அத்தொண்டில் திருப்பனந்தாள் மடத்துத் தலேவரவர்கள் ஈடுபட்டிருப்பது மிகவும் பாராட்டத்தக்கது.

தமிழ் மொழியிலிருந்த எண்ணிறந்த நூல்கள் முற்காலத்தில் பெரும்பான்மை அழிவுற்றமை நிண்ணில் வைக்கவேண்டிய உண்மை களுள் ஒன்றுகும். தற்காலத்திலும் பலநூல்கள் அழிந்துகொண்டிருக் கின்றன. நூற்றேர்ச்சியுடையவர்கள் பெறலருந் தமிழ் நுண் கருத்துக் கீன உலகிற்குப் புலப்படுத்தாது மறைந்துவிடுகின்றனர். இது தமி மூர்க்கு ஒர் பெருங் குறையாகும். இக்குறை மேண்மேலும் நிகழாம விருத்தற்குத் தமிழ்நூல் பேணுதலும் அவற்றின் பொருளே யாவர்க்கும் விளக்கு தலும் உயர்தாத் தமிழ்க் கல்வியைப் பலர்க்கும் பயிற்று தலும் தமிழ்க் கல்வியில் இனிமை பேறப்பித்தலும் இன்றியமையாதனவாம். உயர்தாத் தமிழ்க்கல்வி கற்பதால் ஊதியம் யாதுமில்ல பென்பர் சிலர். செலவின்றி ஒரு கல்விச்சாலேயில் தற்கால முறையில் பல மாணவர் களோடு ஒருங்குசேர்ந்து கல்விகற்பவர்க்கு ஒழுங்கான பழக்க வழக்கள்

களும் தற்கால ஆராய்ச்சி முறைகளும் கைவரு தற்குரியன. கலாசாலே யினின்ற வெளிப்போக்தபின் தமிழ்நாட்டின் பேரூர்களிலும், சிற்றார் களிலும் பொது ஈன்மக்களுக்கு விழுமிய கருத்துக்களே அறிவுறுத்தித் தமிழ் விளக்கத்தைப் பாதுகாக்கும் தலேவராய் கிலவுக்ககுதி கற்ற தமிழர்க்கே உரியதாகும். கற்றவரெல்லார்க்கும் ஊதியவேலே கிடைக் காமற் போனுவம் அவர்களுள் முயற்சியாளர்கள் தங்கள் முயற்சியின் கூலியைப் பெறுவது திண்ணம். செல்வர்களும், பொதுகன்மக்களும் அவர்களேப் பேணுதல் வேண்டும். கற்றுர் எழுதிய நூல்களேப் பிறர் வாங்கிப்படிக்கும் பழக்கமுடையரானுல் அதுவே தக்க பேணுதல் முறையாம். ஒன்றும் கிடையாமற்போனுலும் கல்லாமற் பயனில் -வாழ்க்கை நடத்துவதினுங் கற்றுத்தோர்த்த இலக்கிய இன்பத்தையும், விழுமிய நூல்தரும் மனவமை தியையும், கடவுட் பற்றையும் நாகர்க்து வாழ்தல் பயனுடையதேயாகும். கற்றுசே அறிவு வளர்க்கும் வாழ்க் கையைக் கடைப்பிடிப்பர். அறிவு சான்ற நூல்களே வாங்கி வாசிப்பர். நூல் கற்பாரிலராயின் நூல்களே வெளியிடுவதாற் போர்த பயன் யாது மில்லே. அது உண்பாரிலாத விடத்து நல்ல உணவுவகைகளேச் சமைத்து வைப்பது போலாகும். நூற் பலவற்றையும் ஆராய்க்து பலநூல்கள் எழுதி நூல் நிஃயங்கள் எங்கும் நிரப்பிவைத்தாலும், அவற்றைக் கற்பாரிலாத போது அவை நாளடைவில் பூச்சிக்கும், புழுவுக்கும் இரையாகிக் கெட்டொழியும். சிறந்த கல்வியில்லாத பொதுமக்கள் உயர்ந்த நூல்களேக்கல்லாமற் செய்தி*த் தா*ள்களேயும் பயனில் சி*று நூ*ல் களேயும் கற்றெழிவர். தக்க கல்விமான்கள் நல்ல நூல்களேக் கற்றுப் போற்றுவர். இந்நாட்டிலே செல்வர்களின் மக்கள் பெரும்பாலும் ஆங்கிலங் கற்பர், அல்லது வீண்காலம் போக்குவர். அவர்கள் உயர்ந்த தமிழ் நூல்களேக் கற்க ஆர்வமும், ஆற்றது மில்லாதவர். தமிழ் கற்க விரும்பும் எளிய மாணவர்களுக்கு வறுமை அவர்கள் கல்விவளர்ச்சிக் குப் பெருந்தடையாக விருக்கின்றது. ஆதலால் தமிழ் நூல்கள் அழி யாது நிஃபெறுவதை விரும்புகின்றவர்கள் நற்றமிழ்க் கல்வி பயில்வா ரையும், பயின்றுரையும் பேணுதல் வேண்டும். அது தமிழ் வளர்ச்சிக்கு இன்றியமையாத பெருக் தூணே புரிவதாகும்.

தமிழிலே பல கலேகளேயுங் கற்பார்க்கு அவ்வவற்றிற் குரியவச திகள் செய்யப்படவேண்டும். இலக்கணம், இலக்கியம், சமயதால், மருத்துவம், சோதிடம், மந்தொதால், ஒவியம், சிற்பம், இசை, நாடகம் முதலிய பல துறைகளிலும் கல்வி பயிற்று தற்கும் தேர்தல்கள் நடத்து வதற்கும் தமிழ்ச் செல்வர்கள் வளமாகப் பொன்னு தவு தல் வேண்டும். இசைக்கலேயைத் தமிழிலேயே பயிற்று தற்கு வேண்டப்படும் பொரு ளுதவி மாட்கிமைதங்கிய செட்டி நாட்டாசர் அவர்களால் நன்கு அளிக்கப்பட்டுள்ளது. மாசற்ற தமிழில் இசைக்கலேயின் பல பகு தி களுக்கு முரிய பாடல்கள் இயற்றுபவர்களுக்கு அதன் வருவாய்பெரும் பான்மையும் செல்லு தற்குரியது. பிற கலேகளுக்கும் இத்தகைய பேரு தவியை யளிப்பதற்குப் பிற செல்வர்கள் முன்வாவேண்டும். இறை வன் திருக் கோயில்களுக்கும் திருவிழாக்களுக்கும் எராவாமான பொரு ளுதவி புரிவோர் தமிழ்க் கலேக்கழகங்களே இறைவனது அறிவுக் கோயில் களாகக் கரு துதல் வேண்டும்.

இனித் தமிழ் ஆராய்ச்சியின் பகுதிகளே உற்று ரோக்குவோம். தமிழ்க்கல்**வி வி**டைவில் பாவாமைக்குக் காரணம் உயர்ந்*த* நூல்களின் பொருளும், நயமும் தெள்ளி தின் விளக்கப்படாமையே யாகும். சங்க நூல்களிலுள்ள சொற்களின் நுண் பொருள்களே நண்கு தெரியவேண்டு மாயின் இப்பொழுதுள்ள அகரா திகளின் துணே போ திய தன்று. வொரு சொல்லின் பொருஃாயும் ஆழ்ந்த நிணவுடன் ஆய்ந்து தெளிதல் வேண்டும். பண்டை இலக்கண வமைப்புக்களே இலக்கணம் என்கு கற்றவர்களே தெளிவுபடுத்த முடியும். பதிற்றுப்பத்து, அகரானூற் முதனியவற்றிற்குத் தெளிவான உரைகள் காணுதல் வேண்டும். எல்லாத்தொகை நூல்களுக்குமே செவ்விய உரைகள் எளிய நடையில் எழு தப்படு தல் வேண்டும். வழக்கின் வீழ் ந்த சொற்களின் கரு த்துக் கீளப் பல நூல்களே ஆராய்தலால் திட்பமாக வுணர்தல் கூடும். வேறு தொழிலாளர்கள் வழங்கிய குறிப்புச் சொற்களின் திட்பப் பொருளே அவ்வத்தொழிலாளர்பாற் சென்று உசாவியறிதல் வேண் டும். தமிழ்நாட்டில் சில இடங்களில் மாத்திரம் வழக்கிற் பயிலுஞ் சொற்களுக்கு அவ்வவ் விடங்களிற் சென்ற பொருள் தேர்தல் வேண் டும். பல்வகைச் செடிகள், கொடிகள், மாங்கள் இன்னின்னவென்பதை அவையுள்ள விடங்களிற் சென்று கேட்டுச் சிக்தித்துத் தெளிதல் வேண் டும். கில சொற்களின் பொருளேத் தெளிவதற்குக் கலேகளின் அறிவு இன்றியமை யாததாகும். வான நூல், விலங்கு நூல், மணி நூல், சமய நூல், மருத்துவநூல் முதலியவற்றின் தொடர்பு கில காப்பியங்களிற் கலைந்துள்ளது.

சங்கறூற் பொருளேத் தெளிவுபடுத்தும் பெருமுயற்கி ஒருபுற மிருப்ப, சமய நூல், மருத்துவ நூல் முதலியவைகளிலும் உண்மைக் கருத்தைத் திட்பமாகக் காண்டல் கடுமையான வேஃயாக விருக் கென்றது. சித்த மருத்துவ நூலின் மெய்ப்பொருளே யறியாது பலர் தவருன இரசவாதத்திலிறங்கிப் பன்னுள் முயற்சியில் பணத்தை யிழந் அந்தூலுக்குரிய ஏடுகளேத் தூய்மைப்படுத்திப் பிழையற்ற பாடங்களே வெளியிடுவது பெரியதொரு முயற்சியாகும். பின் அவற் றின் திறவுகோஃக் கண்டுபிடிக்கவேண்டும். அம்முயற்சி சித்தி பெறு மாயின் பண்டைத் தமிழரின் மருத்துவக் கருத்துக்கள் உலகிற்குப் பெரும் பயனளிப்பனவாகும். கீழான நிலக்கனிகளேப் பொன்னுக்குங் கஃயினுண்மையை மேஃ நாட்டார் ஒப்புக்கொண்டுள்ளனர். அச் செயலேச் சுருங்கிய செலவில் செய்து முடிப்பதற்குச் சித்த தூலறிவு பெரி தும் பயன்படும். தீசா கோய்கள் பலவற்றிற்குச் சித்த மருத்து வத்தில் நீர்க்கு மருந்துகளுள்ளன. அம்மருந்துகளேக் குற்றமற்ற முறையிலாக்கும் வகைகளேப் பலர் அறிவதில்லே. அவற்றைப்பற்றிய தெள்ளிய நூல்கள் தக்க ஆராய்ச்சியின் பயனுக எழு தப்படல் வேண்டும். அது மருத்துவக் கீல பயிற்றுவதற்கு இன்றியமையாத முயற்சியாகும். சித்த மருத்துவ முறையைப் பிற மருத்துவ முறைகளோடொப்பிட்டு நூல்களெழு தப்படல் வேண்டும். சிற்றார்களில் சில நாட்டு மருத்துவ ரிடம் குறிப்பிட்ட நோய்களுக்கு இணேயற்ற மருர்துகள் உள்ளன. அவர்கள் எளிதாக அவற்றைச் செய்யும் முறையை உலகிற்கு வெளிப் படுத்து வதில்லே. அத்தகைய மறைப்பினுல் பல அருமையான மருத் துவ முறைகளும் மருந்துகளும் அஃகி யொழிந்தன. அன்னேர்களுக்கு அறிவுரைகள் இனிதாகப் பகர்க்து அம்முறைகளேயும் மருக்துகளேயும் பாதுகாத்தல் பெரு நன்மை யாகும்.

மருத்துவக் கலேக்கும் பிற கலேக்குமுரிய எடுகளே நாடெங்கும் தேடிச் சேர்த்துத் திருத்தமாக எழு திவைத்து வெளியிடுதல் பண்டைத் தமிழர்களின் அறிவுக் களஞ்சியங்களே அழியாமற் போற்றுவதாகும். தற்காலக் கல்கியில் வரலாற்றுராய்ச்சி முதன்மையானவைகளுள் ஒன்று. தமிழிலக்கிய வரலாறு முதலியன செவ்கிய முறையிலினித் தான் அமையப்பெறல் வேண்டும். தமிழிலக்கிய வரலாறு திரு. பூரணலிங்கம் பிள்ளே முதலியோர்களால் எழுதப்பட்டிருப்பினும் ஆங் கிலத்தி லமைக்திருப்பதுபோல விரிக்த முறையில் இன்னும் எழுதப் படவில்ஃ. தமிழ் மொழி வரலாறு காலஞ்சென்ற திரு. வி. கோ. சூரியநாராயண சாஸ்திரியார் முதலியவர்களா லியற்றப்பட்டி ருப்பினும் எல்லாப் பகுதிகளேயும் வகுத்து விரித்து இயற்றப்படும் விரிந்த நூல் இனித்தான் எழுதப்படல் வேண்டும். மொழிநூற்கொள்கைகள் மிகச் சுருக்கமாகவே தமிழில் வெளிவந்துள்ளன. டாக்டர் கால்டுவெல் பாதிரியாரின் திராவிட மொழி யொப்பீட்டிலக்கணம் கெடுகாட்கு முன் இயற்றப்பட்டமையால் அதற்குப்பின் னிகழ்ந்துள்ள ஆராய்ச்சி யின் சார்பாக அது திருத்தி யெழுதப்படல் வேண்டும். இலக்கிய வாராய்ச்சி செய்வோர் இலக்கியத்தினெவ்வொரு பருதிககுஞ் சரித் தொம் வகுக்கவேண்டும். கோவை, அந்தா தி, கலம்பகம், உலா, பரணி, பிள்ளே த்தமிழ் முதலிய சிறு காப்பிய வகைகளுக்குத் தனித்தனி வா லாறு எழுதப்படல் வேண்டும். சிலப்பதிகாரம், மணிமேக்ஃ, பெருங் கதை, சிர்தாமணி, பெரிய புராணம், கர்தபுராணம், கம்ப ராமாயணம், பாரதம், காஞ்சுப் புராணம், தணிகைப் புராணம், திருவினேயாடற் புராணம் முத்விப பெருங் காப்பியங்களுக்கு ஆங்கில முறையில் வெவ் வேறு ஆராய்ச்சி நூல்கள் வெளிவாவேண்டும்.

ஆசிரியர் தொல்காப்பியஞர் காலத்தில் உடை நால்கள் நான்கு வகைகள் இருந்தன. அவை பாட்டிடை வைத்த குறிப்பு, பாட்டுக் கலவாத வுரை, பொருளொடு புணராப் பொய்ம்மொழிக் கதை, பொருளொடு புணர்ந்த நகைமொழி என்பனவாகும். அவற்றினூாய்ச்சி யும், நாடக நூல்களினூரய்ச்சியும், நாவல்களென்னும் கெடுங்கதை யாராய்ச்சியும், சிறு கதை, வாழ்க்கை வரலாறு, கட்டுரை முதலிய வற்றின் வரலாற்முராய்ச்செயும் தனித்தனி நிகழ்த்தப்பெற்ற நூல்கள் இயற்றப்படு தற்குரியன. பிற மொழிகளிலுள்ள சிறந்த இலக்கியங்கள் தமிழில் மொழிபெயர்க்கப் படுதற்குரியன. தமிழிலுள்ள கவின் முதலியவற்றிற்கு முன் மாதிரிகள் தமிழறிஞர்களால் பெருக்கமாக இயற்றப்படல் வேண்டும். மொழி யாராய்ச்சியில் தமிழுக்கும், தமிழோ டொத்தமொழிகளுக்குமுள்ள சொற்பொருட்டொடர்புகள் இலக்கணத் தொடர்புகள் முதலியவற்றை விளக்கும் பேரகரா திகள், திசைச் சொல் லகரா திகள், உலகவழக்கு மொழி யகரா திகள், ஒலியியல் நூல்கள், ஒவியியல் விளக்குங் கருவிகள் முதலியன பெருங் கல்வி நிலேயங்கள் வாயிலாகத் தோன்றி வளரவேண்டும்.

அறிவியல் நால்களே ஆங்கிலம் முதலியவைகளினின்று தமிழில் மொழி பெயர்த்து அமைப்பதற்கு ஒவ்வொரு அறிவியற் க‰க்கும், கணேவல்லா சொருவரும், தமிழ் வல்லா சொருவரும் ஒத்துழைக்கும்படி ஏற்பாடு செய்யவேண்டும். இம்முயற்சியில் ஊசுமானிய பல்க‰க் கமுகத்தார் உருதுமொழிக்கு ஆக்கஞ் செய்வதில் சித்தி பெற்றுள்ளனர். நெடுநாட்கு முன்னேயே இலங்கையில் சில அறிஞர்கள் ஆங்கில மருத் தைவ நூல்களே,ச் சமிழிற் செவ்விதின் மொழி பெயர்த்துள்ளார்கள். சின்னுட்குமுன் சென்னே மாகாணத் தமிழர் சங்கம் அறிவுக் கணேகளே மொழி பெயர்த்தற்குப் பயன்படும் க‰ச் சொற்கோவையொன்று பல அறிஞர்களின் ஒத்துழைப்பின் பயனுக வெளியிட்டுள்ளனர். தமிழ் மொழியியல்பிற்கும் தற்காலப் பாங்கிற்கும் ஏற்றவாறு சொற்கள் அதன்கண் அமைக்கப்பட்டுள்ளன. அரிய கருத்துக்கேற்ற சொற்கள் தமிழிலேயே அமைத்தல் அல்லது ஆங்கிலத்தினின்று நோகத் தழுவி வழங்கு தல் என்னும் இரண்டிலொன்று செய்யத்தக்கது. அம்முறை களே வெடுத்து வடசொற்களினடியாகத் தமிழுக்கு அறிவியல் மொழி களேப் புதிது புதிதாக வமைத்தல் தமிழர்க்குச் சொற்பொருள் விளங் காமைக்கும், வடமொழிக் கலப்பு மிகையால் தமிழைச் சீர்கு‰த்தற்கும் இடந்தரும். மேலும் தமிழின் சொல்லாக்க வளர்ச்சியை அது திண்ண மாகத் தடைப்படுத்தும். ஆதலால் அறிவியற் சொற்களே வடமொழி வாயிலாகத் தமிழிலமைக்கும் முயற்சியைத் தமிழ் வாணர்கள் கைக் கொள்ளாது அறவே விடுக்கற்பாலர்.

தமிழில் தக்க பயிற்கி யில்லாதவர்களால் வெளியிடப்படும் நூல் கீனத் திருத்தியமைப்பதற்கும், திருத்கமுறுதற் கேலாதவற்றைக் கண்டித் தொதுக்குவதற்கும் பல்கீலக் கழகத்தாரால் ஒரு தமிழறிஞர் குழு அமைக்கப்படுதல் வேண்டும். அவர்கள் வாயிலாகப் பொது நன் மக்கள் தக்கதிர்நூல் தகாததிர்நூல் என்று தெரிர்துகொள்ளுதற் குரிய வழிகள் வகுக்கப்படுதல் வேண்டும்.

தமிழ் நாடு மிகவும் தொன்மை வாய்ந்ததாயும், நாகரிகம் படைத்த பிற பண்டை நாடுகளுடன் பழமையான தொடர்புடையதாகவும் இருத் தனின் செவ்ளிதினமைக்கப்பெறுர் தமிழ் நாட்டு வரலாருனது இந்திய சரித்திரத்தையும், உலக சரித்திரத்தையும் உருப்படுத்துதற்குச் சிறந்த தூணேயுரியும். நமது இந்திய நாட்டின் வட**ாகத்தில் புதிதாக அகழ்**ந்து கண்ட ஹாரப்பா, மொஹொஞ்சோதாரோ என்னும் நகரங்களின் தொல் பொருள்களேயும், தொல்லெழுத்துக்களேயும் தெளிவுபடுத்து தற் குத் தமிழ் நாகரிக வரலாற்று ஆராய்ச்சி பெரிதுந் தூணே செய்யும். அங்குள்ள சமயக் குறிகள், எழுத்துக்கள் முதலிய தமிழ்ச் சார்புடை யனவென்று ஹீராஸ் பாதிரியார் முதலிய அறிஞர்கள் அறுதி யிட்டுக் கூறினமை தெளிக. நாகரிக வரலாற்றிணே ஆராய்வோர் இந் நாட்டிலுள்ள ஒவ்வொரு சமுதாயத்தின் பழக்க வழக்கங்களேயும், குடும்பச் சட்ட திட்டங்களேயும் ஆராய்ந்து நூல்கள் இயற்றவேண்டும். உலகிற்குப் பயண்படும் நூல்கள் தமிழிறும், ஆங்கிலத்திலும் எழுதப் படல் வேண்டும். தமிழர் கோயில்களிலுள்ள கட்டிட அமைப்பு நயங் கள், கற்சிற்ப நயங்கள், ஒவிய நயங்கள் முதலியன நூல்கள் வாயிலாக உலகிற்குப் புலனைதல் வேண்டும். இசைக் கலேபோலக் கூத்தைக் கலே யும் புத்துயிர் பெற்று வளர்ச்சி பெய்து தற்குரியது.

தமிழ் நாட்டில் வழங்குஞ் சைவ, வைணவ சித்தாக்த சமயங்கள் பெரும்பான்மை பண்டைத் தமிழர் சமயக் கருத்துக்களேயே அடிப் படையாகக் கொண்டுள்ளன. அவற்றைப் பற்றிய வாராய்ச்சி தற்கால மக்களின் சமய வாழ்க்கைக்கு இன்றியமையாததாகும். தமிழ் நாட்டுச் சமயப்பெரியார், மொழிப்பெரியார் என்போர் வாழ்க்த இடங்களேயும் நினேவுக் குறிகளேயும் பேணிப் பாதுகாத்தல் தமிழர் உள்ளக் கிளர்ச்சிக் குத் தக்க தூண்டுகோலாகும்.

தமிழ்ச்சொற் பொழிவாளர்களும், நூல் கிஃயங்களும் தமிழ் நாட்டிலுள்ள எல்லாவூர்களிலுங் காணப்படுதல் வேண்டும். அது தமிழின் கிஃ பேற்றிற்கு இன்றியமையாததாகும். கோயில்கள் முதலிய பொது கிஃயங்களெங்கும் நூற்கோவை அமைக்கப்பெற்றுப் பொது நன்மக்களுக்குப் பயன்பட்டால் இலவசக்கல்வி யாவர்க்கும் கிட்டுவதாகும்.

கம் செக்தமிழ் மொழியின் வளர்ச்சியும்,ஆராய்ச்சியும் தமிழ்ச் செல்வர்களின் பெருக்துணேகொண்டு கிஃபெறுதற்குரியன. அண்ணு மஃப் பல்கஃவக் கழகம் கிறுவிய பெரியார் பெரும்பொருள் செலவு செய்து தமிழ் உயர்தாக் கல்லூரி, தமிழ் ஆராய்ச்சிக்கழகம், தமிழ் நால் நிலேயம், தமிழ் இசைக்கலாசாலே என்பவற்றை நிலோட்டி வளர்த்து வருகிண்முர்கள். தேவாரக் கலே வளர்ச்சிக்காகத் திருப்பனவு தாள் மடத்துத் தலேவர் தக்க நிதுத்தொகை வழங்கியிருக்கின்முர். இவர்களேப் பின்பற்றிப் பிற தமிழ்ச் செல்வர்களும், பிறமடாதிபதி களும் வளமுறப் பொன்னு தவுவார்களாயின் தமிழ்க் கலேகள் வேளுன் றித் தழைத்தோங்கி உலகெங்கும் தமிழொளி பரப்புந்தகையன வாகும். தமிழன்கே யினிணேயற்ற தனிப்பெருங் கோயிலாக இப்பல் கலேக் கழகம் நிலேபெற்றேங்கும். அக் காள் விரைவில் வருக வென்று எல்லாம் வல்ல இறைவன் திருவருகே வழுத்துவோமாக.

வாழ்த்துப்பா.

K. S. Pillai, M.A., M.L.

திருவளர் தில்ஃப் பெருமுதல் வன்தளி அருமைத் திருப்பணிக் காயிர ஆயிரம் பொற்குவை நல்கிப் பொருவில் கோயில் அற்பு தக் கோபுரம் அணிபெற அமைத்தே ஆவயிற் பூசணே புரியு மந்தணர்க் 5 கீவகை நாடொற மிருபொழு தன்னம் அட்டில் படைத்த மட்டில் செல்வச் செட்டிற் சிறந்த சிர்மிகு பெருங்குடி ஒங்கும் புகழ்பெற வுதித்த வண்ணல் பாங்கு**ற** சிதம்பரப் பதி**ரீர் வேட்கை** 10 தணியத் தீம்புனல் தகுமுறை யுதவிப் பணியிகு நகராள் பதவி தாங்கிக் கவேயுயர் பள்ளி கண்டோ ரிளவல் தஃசிறர் தன்பர்க் கருளுர் தகைமை அங்கயற் கண்ணி அருட்பேர் பூண்ட 15 சங்கத் தமிழ்க்கல் லூரிச் சார்பாய் வடமொழிச் சாலே வண்பண் டி தர்பயில் இடங்களே கிறுப் எழிலார் பதியயல் அண்ணு மலேகர் அழகின் அமைத்தே கண்ணூர் கணவகை கவினப் பெற்ற 20 தமிழ்த்**தாய் விறுறு**க் தனிப்பெரு மாடம் இமிழ்திரை யுலகில் இஃதொன் நேயென நாட்டிய சீரோன் நன்மா ணவர்பலர் காட்டுக் திறமை கதிர்ப்பக் காணம் அலேகடர் தயற்கலே ராடுவார்க் கருஙிதி 25 புலவர் பாகயம் போற்றும் பொன்வளம் பல்கணேக் கழகம் பலபா சாட்டும் பல்வகைப் பண்ணே வெல்வுகர் பரிசுதன்

- கூடல் சிரபுரம் குலவிய சென்னே 30 ஆடல் டில்லி அணித்தாம் டேர்டூன்
- காழகப் பதிபல கதித்துள கலேயிடம் வாழ வளமுறு நன்கொடை வழங்கினேன் தென்மறை வடமறை நூல்பயில் திருத்தலம்
- மன்னி யோங்க மாண்பொருள் அளிக்கோன்;
- 35 பெண்டிர் நலம்பெறப் பிள்ளேகள் சிருறக் கண்டபன் னிஃயம் கவினுற வுதவினேன்; செஞ்சிலுக் கழகம் கிறித்துவ இளேஞர் அஞ்சிறைச் சங்கம் அணி திஃ மண்டபம் இன்னே ரன்ன எண்ணில் தன்மம்
- 40 நன்கு நிஃபெற நற்பொருள் நல்கினேன்;
 - தில்ஃக் கோவலன் திகழ்திருக் கோயில் மல்லல் சிறக்க மாளிகை வகுத்தோன்; இருபெரும் போரிலும் எம்பெரு மன்னர்க் கரும்பெறல் சிதியீர் தார்வர் தினேத்தோன்
- 45 தமிழிசை பெங்குர் தஃமை பெய்த அமிழ்தெனப் பதினு யிரம்பொன் னளித்தோன் கோடியின் மேலாய்க் குவிபொன் பல்லறம் நாடித் தர்த நல்லரு ளாளன் திருவுர் தெளிவு மொருங்குடை யொருவன்
- 50 பரிவும் பண்பும் பாடறிர் தொழுகலும் அறிவும் ஆண்மையும் ஆள்வினே யுடைமையும் செறிவும் பிறங்கிய செம்மல் யாரும் நண்ணும் புகழ்சேர் அண்ண மஃப்பெயர்க் கண்ண மெங்கள் கஃநல வேர்தன்
- 55 இணேயில் வண்மை யென்று மோங்க அணேயுறு மறுப தாண்டின் மேலாய்ப் பல்லாண் டாயுள் பரன்பாற் காதல் மல்லா சினகல மாண்பார் மனகலம் அன்னே செக்தமிழ் அருள்கோக் கவைபிற
- 60 மன்னிய வெல்லா மணந்து வாழ எல்லாம் வல்ல இறைவேண் டுதுமே.

'' தோன்றிற் புகழொடு தோன்றுக வஃதிலார் தோன்றலிற் ரூன்முமை நன்று.''

Mahamahopadhyaya Dakshinadya Kalanidhi Dr. V. Swaminatha Aiyar.

முற்காலத்தில் ஈமது நாட்டில் இருந்த அரசர்களும் சிற்றாசர் களும் தேவாலயங்களே நூதனமாகக் கட்டியும், பழுதுபட்ட பழைய ஆலயங்களேப் புதுப்பித்தும், அவற்றை ஒழுங்காகப் பரிபாலனம் பண்ண வேண்டியதற்கு உரிய ஏற்பாடுகளேச் செய்தும், ஆறகளேயும் குளங்களே யும் வெட்டியும், பலவகையான அறச்சாலேகளே யமைத்தும், வித்தியா பரிபாலனம் செய்தும், புராதனக் கலேகளே வளர்த்தும் தேச மக்களுக்கு மகோபகாரங்களேச் செய்து அழியாப் புகழ்பெற்று விளங்கினர்க ளென்பது சிலாசாஸனங்களாலும், பல நூல்களாலும் தெரியவரும். கால வேறுபாட்டால் அவர்களுடைய நிலேமை குறையவே மேலே குறிப்பிட்ட பலவகைத் தருமங்கள் முதலியன ஆதரிப்பாரின்றி நாளடைவில் குறைந்துபோயின.

இந்நிலேமையில் சென்ற ஒரு நூற்முண்டுக்கு மேலாக நாட்டுக் கோட்டைச் செட்டிமார்களென்னும் தன வைசியர்கள் ''திரைகட லோடியும் திரவியர்தேடு'', ''முயற்சி திருவிணயாக்கும்'' என்னும் முதுமொழிகளுக்கு ஏற்ப அயல் நாடுகளிலும் இந்நாட்டிலும் பல இடங் களிலிருந்து பலவகையான வியாபாரங்கள் செய்து பெரும் பொரு வீட்டித் தங்களுக்குக் கிடைக்கும் லாபத்தில் ஒரு பகு தியைத் தர்ம மகமையென்று ஒதுக்கிவைத்து அந்த மகமையைக்கொண்டு பல வகை யான தர்மங்களேச் செய்து வந்திருக்கிறுர்கள். அவர்களுடைய கணக்குகளின் ஆரம்பத்தில் ஏதேனும் ஒரு ஸ்தலத்து மூர்த்தியின் பெயரால் ஒரு தொகை வரவு வைக்கப் பெற்றிருக்கும். தெய்வத்தையே முதலாகக் கொண்டு நடத்தும் தொழில் விருத்தியுறுவதற்கு என்ன தடை? இறைக்க இறைக்க வற்றுத நல்ல கீர்க் கேணியைப்போல அவர்களுடைய செல்வமும் நல்ல துறைகளில் செலவிடச் செலவிட் விருத்தியுற்று வந்திருக்கிறது. கிவாலயத் திருப்பணி, வேதபாடசாஸ், ஆகம் பாடசாஸ், தேவாச பாடசாஸ், கந்தவனம், பசு மடம், அற்பத்துமூவர் குருபூஜை மடம், கல்விச்சாஸ், அன்னசத்திசம் ஆகிய இவைகள் தனவைகியர்கள் முக்கியமாக மேற்கொண்ட தருமங்கள். இவர்களுள், காளுடுகாத்தானில் உள்ள தனவைகியர்களில் ஒரு பசம்பரையினர் கிவஸ்கலங்களுள் கிறந்ததாக விளங்கும் கிதம்பசஸ்தலத்தின் திருப்பணியையும், திருவானேக்காவின் திருப்பணியையும் மேற்கொண்டு எத்தணமோ லக்ஷம் ரூபாய்கள் செலவிட்டு கிறைவேற்றி யுள்ளார்கள். இத்தகைய கிறந்த தானதரும் பசம்பரையில் உதித்த வர்களே கமது கௌசவம் பொருந்திய டாக்டர் சாஜா ஸர் மு. அண்ண மலேச் செட்டியாசவர்கள்.

இவர்களே ஏறக்குறைய இருபத்தைந்து வருஷங்களுக்கு மேலாக நான் அறிந்திருக்கிறேன். 1920ஆம் ஆண்டு முதல் இவர்களோடு நெருங்கிப் பழகியிருக்கிறேன். இவர்கள்பால் எவ்வளவோ சிறந்த குணங்கள் காணப்படினும் காலத்தை வீண் போக்காமை, காரியத்திலே கண்ணயிருத்தல், தாமறிதல், யாரிடமும் சுலபமாகவும் இன்சொலோடும் பழகுதல், யோசித்து நிதானமாகப் பேசுதல், எண்ணியவற்றை எண்ணியபடியே நிறைவேற்றுதல், சோம்பலின்மை, நிர்வாகத் திறமை என்பவை இவர்களிடமுள்ள சிறப்பெல்புகள். சிறிது நேரம் சம்பா ஷித்தாலும் உபயோகமான பல அரிய விஷயங்களே நாம் இவர்களிடமிருந்து தெரிந்து கொள்ளலாம்.

தம்முடைய முன்னேர்கள் தருமஞ் செய்து வந்த சிதம்பா ஸ்தலத்திலேயே இவர்கள் ஒர் ஆங்கில காலேஜையும் ஸம்ஸ்கிருத காலே ஜையும், தமிழ்க் காலேஜையும், போதனை பயிற்கிக் காலேஜையும் ஏற் படுத்தி நடத்தி வந்த போது தான் இவர்களுடைய தாராளமான சிர்தையையும், கல்வி யபிவிருத்தியிலுள்ள தளராத ஊக்கத்தையும் நான் நன்றுகக் கண்டு கொண்டேன். அன்றி அவ்வப்போது வித்து வான்களே ஆதரித்தீலயும், ஏழை மக்களுக்கு இயன்ற வளவு உதவி செய்வதையும், பொதுவான தர்மகாரியங்களில் முன்வந்து மிக்க ஈடு பாடு காட்டி உபசரித்தீலையும், பல கல்வி ஸ்தாபனங்களுக்கும், வைத் திய சாலேகளுக்கும் தாராளமாகப் பொருளுதவி செய்தீலையும் நான் பலமுறை கவனித்துள்ளேன். இவர்களுடைய சொர்த ஊரில் ஒர் உயர்த்த மருத்துவச் சாலேயை அளவற்ற பொருட் செலவில் அமைத் துச் சுற்றுப் பக்கங்களில் பல மைல் தூரத்திலுள்ள ஜணங்களுக்கும் பயன்படும்படி விசேஷமான அனுகூலங்கீளச் செய்திருக்கிறுர்கள்.

இவர்களுடைய உயர்க்க பரோபகாச சிக்கைகையயும் இவர்கள் செய்துள்ள ஒப்புயர்வற்ற வித்தியாதாணத்தையும் கமது காருண்ய அர சாங்கத்தாரும், சென்ணேச் சர்வகலாசாஃயாரும் நன்கு மதித்துப் பாராட்டி இருப்பது யாவருக்கும் தெரிக்கதே.

இவர்கள் செய்துள்ள பேருங்களுள் தலேகிறந்து விளங்குவது அண்ணுமலே ஸர்வகலாசாகே. ஸர்வகலாசாலே யென்முல் என்ன என்ன அமைந்திருக்க வேண்டுமோ அவ்வளவும் இதில் அமைந்திருப் பதைக் காணலாம். சங்கீதம் முதலியபல கலேகளும் விருத்தியாவதற்கு வேண்டிய வசதிகள் இதில் உள்ளன. கோடிக்கணக்கான பொருளேச் செலவிட்டுப் பலர் ஒன்றுகூடியும் நிறைவேற்றுதற்கு அசாத்தியமான தென்று நிணக்கத்தக்க ஒருசர்வ கலாசாலேயைத் தனியேநின்று நிறுவிய தனிப்பெருமை இவர்களுக்கே யுரியது. இவ்வொன்றே உலகுள்ள ளவும் இவர்களுடைய புகழ் அழியாமல் நிலேத்திருப்பதற்குக் காமண மாகும். இவர்களுடைய பெருமைகளேப்பற்றி இன்னும் எவ்வளவு சொன்னுவும் பற்முது.

தனவைகியர்களுக்கு ஒர் உதாரண புருஷர்களாக விளங்கும் இவர்களுடைய அறபதாம் ஆண்டுவிழா அடுத்தமாதம் கொண்டாடப் பெறுமென்பது தெரிந்து சந்தோஷமடைகின்றேன். இவர்கள் அரோக திட காத்திரத்துடன் இன்னும் பல்லாண்டு பல்லாண்டிருந்து விளங் கும்படி செய்வித்தருளும் வண்ணம் ஸ்ரீ நடராஜ மூர்த்தியைப் பிரார்த்திக்கின்றேன்.

இவமயம்.

அண்ணுமலேப் பல்கலேக்கழகம் நிறுவிய பெருங்கொடை வள்ளலாரும் செட்டிகாட்டரசருமாகிய உயர் சைவத் திருவாளர்

(ராஜா. சர்.) Raja. Sir. அண்ணுமஃச் செட்டியார் அவர்களின் அறுபதாம் ஆண்டு நிறைவுளிழாக்காஃயில் உவர்தளித்தது

ஆசிரியர் : அ. வரதகஞ்சைய பின்னே, தோரமங்கலம்.

திணே:--பாடாண்

துறை:--பாடாண் பாட்டு.

பூமாது மிகமகிழ்ந்து தன்னின்மிக்க மகன்மீனயாய்ப் புவனம்போற்றும் நாமாது தணேத்தழுவி இவண்வாழ்தல் வியப்பென்றே நாவலோர் சொற் பாமாது புகழ்பெருக்குஞ் செட்டிநாட் டி இவக்காசாம் பண்பு பூண்ட பூமாதுங் கக்கருணே யுருவ அண்ணுமலே நாமப்புனிதா வாழ்க.

1

மு திர்சுவைத்தண் டமிழைமுனம் தோற்றி வளர்த்திய அருமை முன்னியன்பாற் அதிபுரியுர் தனதனுக் கண்ணுமஃப் பேரீர்து புதுத் தோற்றத்தாலே விதவிதமாய்ப்பல வன்னக் கஃயணிர்து தமிழ்க்கன்னி விளங்கச் செய்கென் அதவவா னீங்குவர்து புரிகின்ருயென் பதலா அரைத்தலென்னே. மாணிக்கங் கு திரைவின் விறகுமுத லனவிற்றுன் மகனும் செட்டி காணிக்கை யடியரிடம் ஆவியுடல் பொருண்மூன் றுங் கைக்கொண் டப்பாற் பேணிக்கேவல மாமொன் றீவானுன் னன்புமிகும் பெருமா னென்போர் காணக்கை கிறைபொன்னுக் தக்துகுறை தீர்க்கவல்ல கம்பி வாழ்க.

3

ஆய்மொழிகள் பல விருந்தென் தாய்மொழிபோல் நலந்தருமோ அவ்வந்நாட்டுத் தாய்மொழியை மிகவளர்த்தோர் புகழ்மேவு பெருஞ்செல்வந் தருக்கி வாழ்வார் வாய்மொழியோ வுண்மையிது கண்கூடே யென வறிந்த மாண்டினுனே நீமொழிகட் கடங்காத புகழ்வளரத் தமிழ் வளர்ப்பாய் நீடுவாழ்க.

4

தி தெர்தார் தாய்மொழிக்கு மிலயேறிக் கண்டநிலர் தர்தார் பாட்டின் நிலேயறிபொன் பதிரையிரஞ் சொரிர்தார் நெருப்பின் மலர்நீள் பூத்தர்தார் புலவர்கட்கு க்களிறு பரித்தேர்ரல் கிஞர்முர்தைப் பூவின் வேர்தர் கீலேதர்து தமிழ்க்கன்னி மானங்காத்கிடு நீயே கனம் பெற்றுயால்.

5

தொகுப்பர் பொருண் மிகக்குவியக் கண்டுவப்பர் துய்த்தறியார் தொடவேமாட்டார் வகுப்பவரின் விலேமகளிர் கள்வர் குடிவகை முதலாம் வழியிற்சேர வுகுப்பர் சிவபுண்ணிய சுற்றரும செறிக் கெனிலொளிப்பர் உலகரக்தோ மிகுப்பவரும் புகழ்கிணப் போற்பெருங் கடமையாற்றவல்ல வீரர் யாரே!.

6

எங்குமிசை பரப்பியாற் றமிழ்ப்புலவர் தமைப் புரக்கு மீதொன்றேயோ பொங்குசுவைப் பன்மொழி வல்லோர் தோன்றப் படைத்துனது புகழ்போன் மல்கித் தங்கமற்றுர் தனித்தமிழ்ப் பண்ணிசை வளர்க்களிரும்பி வைத்த தனத்திலேயோர் பங்களித்தநினே யுமைக்கோர் பங்க ளித்தோன்காக் கவென்று பரவுவோமே.

7

கக்தபிழ்கா டேணேப்பன் மொழியினர்க்கு பிடந்தந்த நலந்தேர்க் தேயோ வந்துபுகுர் தோங்கியஆங் கிலமு பின்றியமையாத மாண்பு கண்டோ முக்தையோவிய மிசைகைத், தொழில்விவசா யம்போல்வ முதன்மைத் தென்றே எக்தைகீ பல்கஃப்பேர்க் கழக திறிஇப்பெறற்கரிய இசை பெற்றுயால்.

S

காலக்தேர்க் துயர்க்தகல்ல கடைஞற்று மதிறட்பக் கருத்தை யேயோ சேலமுடன் சிவபெருமா னடிக்கெனவே மனங்கொடுத்த செயீலத் தாஞே பாலடைக்தேற் றவர்கொடைக்கை வள்ளலாம் படி வழங்கும் பண்பையேயோ சாலவுயர்க்தது வெதுவென்*, றெளியனேன் விதக்தெடுத்துச் சாற்று கேனே.

9

திகழ்செட்டி நாட்டரசே! யாசியலார் பெரும்பட்டர் தெரிந்து நல்கி மகிழ்முல்லேத் தார்மார்பா! அறிஞர்தங் கண்மணியேபூ மானே மேலாக்

^{*} எளிமை — உயர்ந்த பல நற்குணங்கஃா யுடைமையின் தக்கவாறு அவற்றைப் பாரா.்டற்கியலாமை.

தகைமையினுற் பிறர்க்கெனவாழ் தனவைசி,
யக்குலத்தார் தவமே! பன்னை
இகபர <i>த்த</i> கலம் பெருகப்பரம
னருளால் வாழ்கென்றேத்து வோமே.

10

வாழ்க கின்றனண் மீனே ! வாழ்க கின்றன்போருள் கின்மாபும் வாழ்க வாழ்க்கின தரியவண்மை வாழ்க் கின தாள்கள் என்றும் வாழ்க் காட்டும் சூழ்புகழ் மேன்மேலோங்கி வாழ்காட்க ளின்பமொடு துலங்க மைக்தர் வாழ்கமீன முதற்சுற்றம் வாழ்க வென்று கைம்மாறு வகுக்கின்றேமே.

11

செட்டிகாட்டரசர் ராஜா ஸர் அண்ணுமஃலச் செட்டியார் அவர்களின் அறுபதாம் ஆண்டு கிறைவுவிழாவில் அண்ணுமஃலப் பல்கஃலக் கழகத் தமிழாகிரியர் E. S. வரதராஜய்யர் B. A. இயற்றியது.

மங்கல வாழ்த்து.

- பூமன்னர் போற்றும் புகழான் புலவர் புரவலனும் காமன் வியக்கு ம் கொடையான் வணிகர் கங் காவலனும் வாமன் சுகுணன் வரோதயன் பேரருள் வாரியுயர் பாமன்னர் பாடிடும் பண்பனண் ணுமஃப் பார்த்திபனே.
- 2. செய்தார் அறம்பல சேயிழை பாகன் திருத்தளிக்கட் பெய்தார் வணிகர் பெரும்பொரு ளேனும் பெரும கிண்போல் வெய்தா மடமை வறமை யிவற்றை விலக்கினரார் மொய்தா ரணிபுகழ் அண்ணு மீலப்பெயர் முன்னவனே.
- நற்பா அயிரொடும் புக்கேழ் பிறப்பும் நலமுகளிப் பொற்பா ரறிவைப் புகட்டிடுங் கல்வி புனி தமென்றே அற்பா னி திகொண் டருங்கலேக் கூடம் அமைத்தளித்தே இப்பார் புகழ விருந்தானண் ணுமலே யேந்தல் நன்றே.
- 4. உற்றுர்க் கருள்வோ இறையோர் களேகண் உயர்தமிழ் நூல் கற்றுர்க் குதவுங் கனமுகில் பாவலர் காவலனும் நற்றுர் நிருபரும் நாடும் அறிவன் நயனுடையான் வற்றுத் திருவின் அரசனண் ணுமலே வாழியவே.
- 5. பெற்றுய் பெரும்பொருள் அப்பொருள் தன்னேப் பெருமைபெற வற்று த கல்வி வளர்ப்பா ஹதவும் வாகுணனே கற்றுர் புகழ்பெறுங் காவல நாவல கைவண்மையாற் பொற்றுரு வேங்கப் புறங்கொளண் ணுமீலப் புண்ணியனே.

- 6. கண்ணு மெனப்புக லெண்ணே டெழுத்துங் கவின்செறியப் பண்ணு ரிசையும் வளர்ப்பான் விரும்பிப் பருநிதியம் விண்ணூர் தருமெழில் தேனுவைப் போல மிகப்பொழியும் அண்ணுலண் ணுமீலப் போரசே யுயர் அற்புதனே.
- 7. தேஞர் செழுந்தமி ழாரிய மாதிய செம்மொழியும் ஆனப் பெருமை யிசையும் வளா வவாளிமட மாஞரு மாடவர் தாமும் பயில மகிழ்ந்தளித்தான் கானு மலங்கலண் ணுமலே நூற்கழ கத்திண்டே.
- அறத்தா றிதுவென் அலகோர் அறிக்திட வார்ந்த அன்பின் றிறத்தாற் கலேகள் வள பப் பொருள்தெரிக் தீக்தனேமா னிறத்தாள் விழையும் கிதியனண் ணுமலே கேர்மையனே பெறத்தா னரிய பெரும்பேறு பெற்றுப் பிறங்குகவே.
- உற்று னறிவ தறிந்துயர் மக்களே யொண்ணி தியம் பெற்று னறம்பல பேணிநின் முன்கலேப் பேற்றினுயர் கற்றூர்க் குதவும் ஒருவன் பெரியன் கலேமகிபன் நற்று ரணிபுகழ் அண்ணு மலேப்பெயர் நற்றவனே.
- 10. சிரம் பலவன் நடமார் திருத்தில்லேச் செம்பதியிற் போன் பொடுகின் பெயரா னமைந்த பெருங்கமுகம் பாரம் புலிகதிர் போலென்று கின்று பயன்றாவே நாரம் பயில்சடை வானவன் பேரருள் நாடுவனே.
- 11. எப்பா லவரும் விரும்பும் பெரும்புக மேற்றுலகில் முப்பா னிரட்டி யகவை முடித்தனே மொய்யறங்கள் தப்பா தஞற்றினே அண்ணுமலேப் பெயர்த் தண்ணளியோய் ஒப்பா ருணேயெவர் வாழிபல் லூழி உளஞ்சிறக்கே.

திருவாளர் ராஜா ஸர் அண்ணுமலேச் செட்டியார் அவர்களின் அறுபதாம் ஆட்டைத் திருமண

உயிர்வர்க்கக் குறிலெழுத்தைம்பா.

[செல்ஃ சபாரஞ்சித பரமானக்த கவியும், கோவூர்த் தேவாரப் பாடசாஃ ஆசிரியரும் ஆகிய

[த. ஆ. வேங்கடாசலப் பிள்கோ இயற்றியது.]

பன்னிருசீர்க் கழிநேடிலடி ஆசிரிய விருத்தம்.

அங்கைபெனர் திரைகளினுற் கரைமருங்கி அயர்மணிகள் அள்ளிக் கொட்டும் அழமுடைக் கடல்புடைசூழ் பேருலகிற் றபிழ்வளரிவ் வளிர்தென் குட்டில் மங்கையொரு பங்குடையோன் நண்ணருளாற் சிறந்ததன வணிகச் செல்வ மணிவிளக்காய்த் தோன்றிகறுக் தமிழுடனுங் கிலங்கற்று மணக்கத் தேறிப் பொங்கு தவச் சைவரெறி பிறழாமற் *நிட*ம**வி**க்**த** புலமை கொண்டு போற்றுமர சாங்கத்தா ராலுமதிக் கப்பெற்றே புகழ்மிக் கோனுப் எங்குமெவர்க் கும்மெதிலுஞ் சிறந்துள்ளாய் நின்பெருமை இயம்பற் பாற்றே எழின்பிகுந்த ராஜாஸர் அண்ணு மஃப் பெரியோய் இனிது வாழ்க.

இடதுமலர்த் தாடூக்கித் திருநடனம் புரியுமெம் திறப்பி லண்ணல் இலங்கு சிதம் பாத்தரு கில் அருட்டிருவேட் களத்திலுன்றன் எழினுமத்தால் திடமுறன் நன்னகா முண்டாக்கி அதில்யுநிவர் சிட்டி பென்னும் சிறர்துளபற் கணக்கழகம் நிணபிட்டு மா**ணவ**ர்க்கு*த்* தென்சொ லோடு வடமொழியு மாங்கிலமும் சங்கீதப் பெருங்க்ஃயு மற்றும் யாவும் வழுவற6 உணர்த்திடவைத் தணமேலும் இவ்வறத்தின் வளர்ச்சி மல்க உடனலத்திற் காகஅங்கோர் வைத்தியசா வேயுகிறுளி உவகை பூக்தாய் உலகுபுகழ் ராஜாஸர் அண்ணும ஃப்பெரியோய் <u>ஒ</u>ங்கி வாழ்க.

உய்வருளுஞ் சிதம்பரத்திற் றேவாரத் திருமுறைக ளுணர்த்து தற்கோர் உயர்பாட சாஃயமைத் தங்குள்ளார்க் கூணுடைகள் உதவுஞ் சிரும் தெய்வகுரு பூசைக்குத் தனிமடமொன் றமைத்திட்ட சிறர்த மாண்பும் திகழுமன சத்திரங்கள் பிறவிடத்தும் கிறுவியுள திடத்த அன்பும் மெய்வருக்தி யீட்டியுள பொருள்களேகல் வழிகட்கே வேண்டு மட்டும் மிகவழங்கி யறம்பேணும் வள்ளன்மைப் பெருங்குணமு மிகவே பெற்ருய் சைவஉண மூவுலகுங் கொண்டாடும் இதிற்சிறிதுர் தடையே யில்லே தகைமைகிறை ராஜாஸர் அண்ணும ஆப்பெரியோய் சத்தம் வாழ்க.

புகிபத்தி யின்சொல் கூறல் எவ்வுயிர்க்கு மிரங்கிடுதல் பொதுகோக்கங் குறிப்புணர்தல் ஈகை சார்தம் வென்றிதவம் நிறைவடக்கம் வாய்மை கிடம் பண்புடைமை விருப்ப மின்மை வெகுளாமை மடியின்மை நடுவுநில திறம்பாமை வெருட்சி யின்மை நன்றிமற வாமைஊழ் அவைத்துணிவு சொல்வன்மை நல்லோர் நேசம் நட்புபுகழ் முதலெல்லா வளங்களினுர் தலேசிறர்தே நாட்டின் போக்கும் சென்றுபலவிடத்தும்கீ தேர்த்துள்ளாய் நினக்கொப்பார் செகத்தி லில்லே திருவளரும் ராஜாஸர் அண்ணும

ஃப்பெரியோய் சிறந்து வாழ்க.

ஒருமணத்தை ச் தடுத்துமுன முலகுய்யக் கயிலேயினி அரைக்க வாறே உயர்நாவ லூர்வளரும் வன்றெண்டப் பெருந்தகையார்க் குவகை தோன்ற இருமணத்தைச் செய்துவைக்கிங் கன்னவசை யாட்கொண்ட எக்கை கோக்கால் இலகுறமுன் அறபதாமாட் டைப்பருவம் கிறைந்துபெயர்க் திடுதலால் அத் திருமணத்தை இவ்விசுவிற் புரட்டாசி பனி எண்டிற் சிறக்கும் வண்ணம் செகத்திலுளார் கடத்திவைக்கும் செய்திதெரிக் தியாமி தணே த் தெரிக்க லுற்றேம் பெருமணத்தைக் கண்டவர்கேட் டவசெவர்க்கும் உண்டு இழ்ச்சி பிறக்க நாளும் பெட்புமிகும் சாஜாஸர் அண்ணும ஃப்பெரியோய் பெரி*து*ம் வாழ்க.

வாகைத்திணே

[நாவலர் ந. மு. வேங்கடசாமி நாட்டார், பிரின்சிபால், கரந்தைப் புலவர் கல்லூரி.]

மக்கள் அடையவேண்டும் உறுதிப் பொருள்களே அகப் பொருள் எனவும், புறப் பொருள் எனவும் பாகுபடுத்துரைப்பது தமிழ் தூன் முறை. இவை அறம், பொருள், இன்பம், வீடு என விரித்துரைக் கவும்படும். அகம் என்பதில் இன்பமும், புறம் என்பதில் அறம் பொருள்களும் அடங்கும். வீடு என்பது அகம் புறம் இரண்டினும் அடக்கிக் கூறப்படும். அகப்பொருள், புறப்பொருள் பற்றிய ஒழுக லாறு முறையே அகத்திணே, புறத்திணே எனப்படும். குறிஞ்சி, பால, முல்லே, மருதம், செய்தல், கைக்கிளே, பெருந்திணை என அகத்திணே எழு வகைப்படும். வெட்சி, வஞ்சி, உழினை, தும்பை, வாகை, காஞ்சி, பாடாண் எனப் புறத்திணை எழு வகைப்படும். குறிஞ்சி, பாலே முதலிய அகத்திணேகள் இல்லறத்திற்குரிய தலேவன் தலேவியரின் கூட்டம், பிரிவு முதலியவற்றையும், வெட்சி, வஞ்சி முதலிய புறத் திணேகள் அறம் பொருள் கருதிய அரசர் முதலாயினுரின் கிரை கோள், பகைமேற் செலவு முதலியவற்றையும் குறிக்கும்.

மக்கள் புறத்திலே பொருளீட்டுதலும், அறம் புரிதலுமாகிய செய்கையெல்லாம் அகத்தில் இன்பக் துய்க்குஞ் செயலோடு கெருங் கெய தொடர்பும் ஒற்றுமையும் உடையனவே. அதனுற்றுன், ஆசிரி யர் தொகோப்பியலுர்.

' வெட்சி தானே குறிஞ்சிய**து புறனே'**'

என்றிவ்வாருகப் புறத்திணே எழினேயும் ஒவ்வோரகத்திணேயோடும் சார்த்தியுரைப்பாராயினர். ஆயின், அவற்றிற்குள்ள இபையுகள் இப்பொழுதுள்ள உரைகளினுல் மூற்றும் தெளிவாக அறியக்கூட வில்லே.

புறத்திணேகளில் முன்னுள்ள வெட்சி, வஞ்சி, உழிஞை, தும்பை என்ற கான்கும் போர்ச் செய்திகளாகலின் மறத்திறன் உடையன. அடுத்துள்ள வாகை மறம், அறம் என்னும் இருதிறனு முடையது. '' தா**வில் கொள்**கைத் தத்தங் கூற்றைப் பாகுபட மிகுதிப் படுத்தலென்ப''

என்பது வாகைத் திணேயின் இலக்கணம். இதன் பொருள் கேடில் லாத கோட் பாட்டினேயுடைய தத்தமக்குள்ள இயல்பை வேறுபடம்கு திப்படுத்தல் என்பதாம். எனவே, குலம், கில, தொழில் முதலிய வற்ருல் வேறுபாடுடைய மக்கள் யாவரும் தத்தமக்குரிய பகு திகளேத் தம் அறிவு ஆண்மை முதலியவற்ருல் மேம்படுத்து தல் வாகையாம் என்க. இயல்பல்லா தவற்றை மேற்கொண்டு அவற்றின் மேம்படுதல் வாகையாகாதென்பது ''தாவில் கொள்கை'' என்பதனுற் பெறப்படும். ஈச்சினர்க்கினியர், இதற்கு, 'வலியும் வருத்தமுமின்றி இயல் பாகிய ஒழுக்கத்தால்' என்று பொருள் கூறி, 'தாவில் கொள்கை மெனவே இரணியனேப்போல வலியானும் வருத்தத்தானும் கூறுவித் துக்கோடல் வாகையன்று மிற்று' என்றுரைப்பர்.

இதனேப் பாலேத்திணேயின் புறம் என்பர். ஒதல், காவல் பொருளீட்டல் முதலியன குறித்துத் தலேவன் தலேவியைப் பிரிர்து செல்லுதலாகிய பாலே அறம் பொருளின்பங்கட்கு எதுவாயிஞற்போல வாகையும் ஆதலானும், பிறவாற்றுனும் அவ்விரண்டும் ஒற்றுமை யுடையனவாம். இனி, 'தத்தம் கூறு' என்பதை விரித்து வாகைத் திணேயைப் பாகுபடுத்துரைக்கும்தொல்காப்பியச் சூத்திரம்,

> " அறுவகைப்பட்ட பார்ப்பனப் பக்கமும் ஐவகை மரமேன் அரசர் பக்கமும் இருமூன்று மரமேன் ஏனேர் பக்கமும் மறுவில் செய்தி மூவகைக் காலமும் செறிமின் ஆற்றிய அறிவன் றேயமும் நாலிரு வழக்கிற் ரூபதப் பக்கமும் பாலறி மரமேற் பொருநர் கண்ணும் அனேகிலே வகையோ டாங்கெழு வகைமில் தொகைகிலே பெற்ற தென்மஞர் புலவர்"

என்பது. ஆசிரியர், வகையறுத்தியாக்கப் பெற்ற ஒழுக்கமுடைய பார்ப்பனர் முதலிய நாற்குடியினரை முதற்கண் நிறுவி, ஓர் குடிக் குரியால்லாத அறிவர், தாபதர் என்போரையும், சொல், பாட்டு, கூத்து முதலியவற்றுற் பொருது வென்றி கொள்ளும் பொருரையும் பின்னர்க் கூறி, அன்னர் ஒழுக்கம் நிகேக்களமாக வாகை பிறக்கும் என்பது தோன்ற வைத்துள்ளமை காண்க. ''கூ திர் வேனில்'' என்னும் அடுத்த சூத்திரத்தில், வாகைத் திணேயின் துறைகள் மறத்தின் பகுதியாக ஒன்பதும், அறத்தின் பகுதியாக ஒன்பதும், அறத்தின் பகுதியாக ஒன்பதும் கூறப்பட்டுள்ளன. இத்துறைகள் முற்கூறப் பட்ட பார்ப்பனர் முதலியோர், கூறப்படாத திணே மக்கள், பாணர் முதலிய ஏனேப் பழங் குடிமக்கள் ஆகிய யாவர்க்கும் பொதுவுரிமை யுடையனவே. வென்றி கருதிப் பாசறைக்கட் சென்றிருத்தலும், வென்றுகளம் வேட்டலும், வெற்றிக் களிப்பால் தேர்முன் குரவை யாடுதலும், பெரும் பகையைத் தடுத்து கிற்றலும், உயிர்ப்பலி கொடுத் தலும் முதலாயின மறத்தின் பாற்படுவன. போர் வென்றியை வாகை என்றலும், அதற்கு வாகைமாலே சூடுதலுண்டென்றலும் பிற்றை காளிலக்கியங்களிற் பரக்கக் காணப்படும். வென்ற வீரரே யன்றி அவரது படைக்கலமும் வாகைமிலேதல் கூறப்படும்.

'' நீடிய அரக்கர் சேஃன கீறைபட்டழிய **வாகை** சூடிய சிஃவூராமன் ''

என்றுர் கம்பர்.

'' வெற்றி வாகையே சுமக்கும் வேலே வணங்குவ தெமக்கு வேலே '' என முருகக் கடவுளின் வேற்படைக்கு வணக்கங் கூறிஞர் ஓர் கவிஞர்.

இனி, அறத்தின் பகுதியாகக் கூறிய துறைகள் ஒவ்வொன்றும் வாழ்க்கையின் குறிக்கோளாகும் விழுப்பமுடையனவாகவின், ஒவ் வொருவரும் கருத்தில் இருத்தற்பாலன. மேலேச் சூத்திரத்தோதிய 'பார்ப்பனப் பக்கம்' முதலியவற்றை முதற்கண் ஆராய்ந்து. பின் இவற்றை விளக்கி முடிப்பாம்.

பார்ப்பனப் பக்கமாவது பார்ப்பனரியல். அரசர் பக்கமாவது அரசரியல். ஏனேர் பக்கமாவது வணிகரியலும், வேளாளரியலும் அறுவகை, ஐவகை, இருமூன்று என்பன அவர்கட்கு விதித்துள்ள தொழில்கள். ஆகிரியர் வழக்கும் செய்யுளும் ஆராய்ந்து நூலியற்றினு ராகலானும், சில்வகை யெழுத்தின் செய்யுட்டாகிய சூத்திர யாப்பில் இயற்றப்படும் நூலின் (இலக்கணத்தின்) கண் யாவற்றையும் எஞ்சாது கிளந்துரைத்தல் பொருந்தாமையானும், அறுவகை முதலியவற்றின் பெயர்களே இலக்கியம் நோக்கி அறிந்து கொள்ளுமாறு விடுத்தார். பார்ப்பனர் அந்தணரெனவும் படுவர். அவர்க்குரிய தொழில்கள்; ஒதல், ஒதுவித்தல், வேட்டல், வேட்பித்தல், ஈதல், ஏற்றல் என்னும் ஆறமாம்; " ஓதல் வேட்டல் அவைமேறர்ச் செய்தல் ஈதல் ஏற்றலென் ருறுபுரிக் தொழுகும் அறம் புரி யக்தணர்"

(பதிற்றுப்பத்து-24)

என இலக்கியத்துள் அவைபெறப் படுதல் காண்க. அவன் அவற்றுள் ஒரோ வொண்றைச் செய்தமையும் செய்யுட்களா லறியப்படும். அங் ஙனமே அரசர், வணிகர், வேளாளர் என்பார்க் குரியனவும் அறியப் படும். அரசர்க்குரிய தொழில்கள் ஒதல், வேட்டல், ஈதல், காத்தல், தண்டஞ்செய்தல் எண்ணும் ஐந்துமாம். வணிகர்க்குரியன ஒதல், வேட்டல், ஈதல், உழவு, பசுக் காத்தல், வாணிகம் என்னும் ஆறுமாம்;

> " உழுது பயன்கொண் டொலிகிரை யோம்டுப் பழுதிலாப் பண்டம் பகர்ந்து — முழுதுணர ஓதி யழல்வழிபட்டோம்பாத வீகையான் ஆதி வணிகர்க் கரசு"

> > (பு. வே. மாகூ)

என்பது காண்க. வேளாளர்க்குரியன உழவு, ஏணேத்தொழில், விருந் தோம்பல், பகடுபுறந்தால், வேட்டல், ஓதல் என்னும் ஆறுமாம் என்பர் இளம்பூரணர். விருந்தோம்பல் என்பது ஈகையில் அடங்கும். இவ்வாற்றுல் ஓதுவித்தல், வேட்பித்தல், ஏற்றல் என்னும் மூன்றும் பார்ப்பனர்க்கும், காத்தல் தண்டஞ்செய்தல் என்னும் இரண்டும் அரசர்க்கும், கிரையோம்பல், வாணிகம் என்னும் இரண்டும் வணிகர்க் கும், பகடுபுறந்தால், உழவு, உழவொழிந்த தொழில் என்னும் மூன்றும் வேளாளர்க்கும் சிறப்புரிமை யுடையன என்பதும், ஓதல், வேட்டல், ஈதல் என்னும் மூன்றம் நாற்பாலார்க்கும் பொதுவாவன என்பதும் பெற்ரும். உழவு வணிகர்க்கு முளதேனும் வேளாளர்க்கு, உழவும், வணிகர்க்கு வாணிகமும் சிறந்தன வென்பது மாபியலானறியப்படும். இவை யாவும் மாபியலிற் கூறற்பாலவேனும், இவைபற்றி வாகை கிகழ் தலின் ஈண்டுக்கூறி, இவற்றுளடங்காத சிலவற்றை மாபியலிற் கூறினு சென்க. ஈண்டு 'இருமூன்று மாபின் எனேர்' என வணிக**ரை**யு<mark>ம</mark>் வேளாளரையும் ஒருங்கியைத்துக் கூறியது அவ்விருவர்க்கும் வேற்றுமை சிறிதாகலின் என்க. எனவே ஆரிய வருணங்களுள் நான்காம் வருணத் திற்கும் தமிழ வேளாண்குடிக்கும் யாதும் இயைபின்றென்பது பெற் ரும்.

இனி, பொதுத்தொழில்களான மூன்றனுள் வேட்டல் யாவர்க்கும் ஒரு பெற்றியதன்றித் திரிபுடையதாகும். காலதேயம் பற்றி மாறுக் தன்மையதுமாம். ஏண்யிசண்டுமே யாவரும் எஞ்ஞான்றும் கடகைக் கொள்ளற்பாலவை. மக்களியற்றும் விண்களுள் இவ்விரண்டும்போற் சிறக்தன வேறில்லே. பவணக்திமுனிவர் தமது என்னூற்கண் ''ஒதல் ஈதல் ஆதிப்பல்வின்'' என இவ்விரண்டையும் கிளக்தோதி, ஏனேய வற்றை 'ஆதி' என்பதனுள் அடக்கினமை இவற்றின் சிறப்பை உளங் கொண்டே யாதல்வேண்டும். இவற்றுள்ளும் ஈகையானது புகழுக்குச் சிறக்த காரணமென்பது, வள்ளுவனர் ஈகையின்பேன் புகழைவைத்து, 'ஈதல் இசைபட வாழ்தல்', 'ஈவார்மேல் கிற்கும் புகழ்' எனக் கிளக் தோதுதலானும், தொல்காப்பியனர் வாகையின் துறைகூறமிடத்த 'இடையில் வண்புகழக் கொடைமை' என்றுரைக்தலானும் இனி தறியப்படும். மற்றும், வண்மையென்பது சிறக்க வீரராயினர்க் குரியதாதலேப் புறப்பாட்டுக்கள் முதலியவற்றுலறியலாகும்.

> '' ஆனவீகை யடுபோ ரண்ணல் '' ''பேகன், கொடைமடம் படுத லல்லது படைமடம் படான் பிறர் படைமயக் குறினே ''

எனவருதல் காண்க.

இனி, அறிவன் என்பதற்கு நச்சிஞர்க்கெனியர் முழுதுணர்வுடையோன் எனக்கூறி, அறிவர்க்குக் காட்டாக அகத்தியஞர் முதலி யோரைக் குறித்தமையே பொருத்தமாகும். இளம்பூரணர் கணிவண் (சோதிடன்) எனக் . கூறியது பொருந்துவதன்று. வெண்பாமாலே யுடையாரும் அறிவன் வாகை என்பதற்கு முக்காலமும் உணரும் பெரியாரியல்பு என்றே கூறி, கணிவணக் குறித்துக் கணிவன் முல்லே எனவேறு துறைகூறிப் போர்தார். நாலிருவமுக்கிற்றுபதப் பக்கம் என்பது தவஞ்செய்வார்க்குரிய எண்வகை மியல்பு;

'' கீர்பலகால் மூழ்கி ஙிலத்தசை இத் தோலுடி இச் சேர்சடை தாழச் சுடரோம்பி—ஊரடையார் கானகத்த கொண்டு கடவுள் விருந்தோம்பல் வானசுத் துய்க்கும் வழி''

(பு. வே. மாலே)

என்பது அவ்வெட்டணேயும் உணர்த்தும். ஆகிரியர் ஈச்சிரைக்கினியர் சிறிது வேறுபட உரைத்துள்ள தணே அவ்வுரை ரோக்கி அறிக. பாலறி மாபிற் பொருகர் என்பார் சொற்போர், இசைப்போர் முதலியவற்றில் வென்றி பெய்துவோராவர்.

இனி, அறத்தின் பகுதியாகக் கூறிய துறை ஒன்பதணேயும் கோக்குதும்:

- ''பக்ட்டினுனு மாவினுனும், துகட்டபு சிறப்பிற் சான்ளூர் பக்கம்''—இளம் பூரணர் ஆவினுனும் எனப் பிரித்து, இது, பகடு புறர் தரும் வேனாளரையும், நிரையோம்பும் வணிகரையும் குறிக்குமெனக் கொண்டார். நச்சினர்க்கினியர் மாவினுனும் எனப் பிரித்து, உழவஞ் சாமையும், பகையஞ்சாமையுமாகிய வெற்றியைக் குறிக்குமென்றனர்.
- 2. ''கட்டில் நீத்தபால்''—இதற்கு அரசன் அரசவுரிமையைக் கைவிட்ட பகுதி என்றனைத்து, அரசு துறந்த வென்றிக்குப் பாதணே யும், பார்த்தணயும் காட்டினர் நச்சிஞர்க்கினியர். இளம்பூரணர் 'கடி மீன நீத்தபால்' எனப் பாடங்கொண்டு, பிறர்மீன நயவாமையெனப் பொருள் கொண்டார். இது 'கட்டமை யொழுக்கம்' என மேல் வருவதனுள் அடங்குதலின் 'கட்டில் நீத்த' என்பது பொருத்தமாகத் தோன்றுகிறது.
- 3. ''எட்டு வகை நதலிய அவையம்''—இஃது அவைக்கண் இருக்கும் சான்ருரியல்பு கூறுகின்றது. புறப்பொருள் வெண்பா மாஃ அவைய முல்ஃ, சால்பு முல்ஃ என இரு துறை கொண்டு, முன்ன தற்கு ''நவைநீங்க நடுவு கூறும், அவை மாந்தர் இயல்பு'' என்றும், பின்னதற்கு, ''சான்ருேர்தம் சால்பு'' என்றும் கூறுகின்றது. இவ் விரண்டும் 'எட்டு வகை நுதலிய அவையம்' என்பதில் அடங்கும். எண்வகைக் குணத்திணயும் உருவகஞ் செய்து சான்றேரியல்பு கூறும் பின்வரும் அழகிய ஆசிரிய மாஃச் செய்யுள் அறிந்து இன்புறற்பாலது:
 - ''குடிப்புறப் புடுத்துப் பனுவல் சூடி விழுப்பே ரொழுக்கம் பூண்டு காமுற வாய்மைவாய் மடுத்து மாக்தித் தூய்மையிற் காதலின் பத்துட் டங்கித் தீதறு கடுவுகிலே கெடுககர் வைகி வைகதும் அழுக்கா றின்மை அவாஅ வீன்மையென் றிருபெரு கிதியமும் ஒருதா மீட்டும் தோலா காவின் மேலோர் பேரவை

உடனமர் இருக்கை பொருநாட் பெறுமெனிற் பெறுகதில் அம்ம யாமே வரன்முறைத் தோன்றுவழித் தோன்றுவழிப் புலவுப் பொதிந்து நின்றுழி நின்றுழி ஞாங்கர் நில்லாது நிலேயழி யாக்கை வாய்ப்ப இம் மலர்தலே யுலகத்துக் கொட்கும் முறப்பே"-

- 4. ''கட்டமை ஒழுக்கத்துக் கண்ணுமை''—உண்மை நூல் களாற் கட்டப்பட்ட ஒழுக்கத்தோடு பொருந்திய காட்சி என்றபடி வள்ளுவஞர் இல்லற வியலிற் கூறிய அடக்கமுடைமை, ஒழுக்க முடைமை, பிறன்மண நயவாமை, அழுக்காறுமை, வெஃகாமை, தீவிண் யச்சம் முதலியன இதன்கண் அடங்கும்.
- 5. '' இடையில் வண்புகழ்க் கொடைமை''—இடையீடில்லாத வண்புகழைப் பயக்கும் கொடைத்தன்மை என்றபடி 'உலக முழுதும் பிறர் புகழ் வாராமைத் தன்புகழ் பரத்தலின் இடையில் என்றுர்' எனவும், 'இக் கொடைப் புகழுடையான் மூப்புப் பிணி சாக்காட்டுக்கு அஞ்சாமையின் அது வாகையாம்' எனவும் நச்சிரைக்கினியர் உரைத் தவை உளங்கொளற்பாலன.
- 6. ''பிழைத்தோர்த் தாங்குங் காவல்''—தங்மைப் பிழைத் தோரைப் பொறுக்கும் பாதுகாப்பு என்றவாறு. பிழை செய்தோர்க்கு இம்மையும் மறுமையும் ஏதம் வராமற் காத்தலின் இஃது ஏணேயோரின் வெற்றியாயிற்று என்பர். கொடையும், பொறையும் இல்லறமாயினும் சிறப்பு கோக்கி வேறு கூறிஞர்.
- 7. ''பொருளொடு புணர்க்த பக்கம்'' மெய்ம்மையுடன் கூடிய இயல்பு; ஆவது மெய்யுணர்வு. இதற்கு அரசர்க்குரிய ஆறங்கங்களே யும் புதல்வர்ப் பேற்றையும் பொருளாகக் கொள்வது பொருத்த முடைத்தன்று.
- 8. ''அருளொடு புணர்க்த அகற்கி'' அருளுடைமையோடு பொருக்கிய துறவறம் என்றபடி. 'அருளொடு புணர்தலாவது ஒரு யிர்க்கு இடர் வக்துழித் தன்னுயிரைக் கொடுத்துக் காத்தலும், அதன் வருத்தம் தனதாக வருக்துதலும், பொய்யாமை கள்ளாமை முதலியன வுமாம்' என்றுர் கச்சினர்க்கினியர்.

9. '' காமம் நீத்தபால்''—எப்பொருள்களினும் பற்றற்ற பகுதி.

இறு திக்கட் கூறிய மூன்றும் திருக்குறளிலுள்ள மெய்யுணர்வு, துறவு, அவாவறுத்தல் என்னும் அதிகாரங்களின் பொருண்மை யுடையன. இங்ஙனம் தொல்காப்பியர் கருத்தும் வள்ளுவர் கருத்தும் ஒருமையுறும் இடங்கள் பல.

இதுகாறும், வாகையாவது மாந்தர் தத்தம் இயல்பினே மிகுதிப் படுத்தலாம் என்பதும், அது மறம் அறம் என இரு திறப்படும் என்பதும், அவற்றின் பகு திகள் இவை யென்பதும் ஒருவாறு உரைக்கப் பெற்றன. அறத்தின் பகு தியாயவற்றுள் கொடை வெள்ற ஒன்றெனக் கண்டாம். தமிழ் நாட்டிலே இஞ்ஞான்று இடையில் வண்புகழ்க் கொடைமையால் வாகை சூடியவர் அண்ணும்ஃப் பல்கஃக் கழகத்தை நிறுவியோராகிய ராஜா சர். அண்ணும்ஃச் செட்டியாரவர்களே யாவர். அவர் குடும்பத் தினரும் அவரும் இயற்றிய பிறவறங்களும் உலப்பில் லனவே. எனினும் கல் வியின் பொருட்டு அவர் அளித்த இக்கொடையாவற்றினும் விஞ்சிய தொன்றுய் வாடைக்கு சியதாயிற்று. வாணிக்கு வாவைக்கு மகவும் இயைபுடையது. அஃது,

" ஈட்டிய தெல்லாம் இதன் பொருட் டென்பதே காட்டிய கைவண்மை காட்டிஞர்—வேட்டொறும் காமருதார்ச் சென்னி கடல்சூழ் **புகார் வணிக**ர் தாமரையும் சங்கும் போல் தந்து''

என்பது. தாமரை - பதுமகிதி. சங்கு - சங்ககிதி. அண்ணுமில வள்ளவின் அறுபதாம் ஆண்டு கிறைவெய்து தல் கண்டு அளேவரும் களிகூர்வர்; கொண்டாடுவர்; வாழ்த் தெடுப்பர். யாமும் அவரது நெடிய நல்வாழ்வு கருதி, திருச்சிற்றம்பல முடையார் திருக்கையா லெழுதிய திருப்பாட்டினேச் சிக்தித்து வாழ்த்துகின்றேம்.

''காரணி கற்பகம் கற்றவர் நற்றுணோ பாண ரொக்கல் சீரணி சிந்தாமணி அணிதில்லேச் சிவனடிக்குத் தாரணி கொன்றையன் தக்கோர்தம் சங்கநிதி விதிசேர் ஊரணி உற்றவர்க் கூரன்மற்றியாவர்க்கும் ஊதியமே''

ந. மு. வேங்கடசாமி நாட்டார்.

" மாக்ஸ்வெல் "

ஆர். கே. விசுவனுதன். எம். ஏ. பௌதிக நூலாசிரியர்

சென்ற நூற்முண்டில் கணித முறையில் விஞ்ஞான ஆராய்ச்சி கடத்தியவர்களுள் தலேசுறக்து விளங்கெய இவர், ஸ்காட்லண்டு தேசத் தில், எடின்பரோ ககில், 1831-ஆம் ஆண்டு ஜுன் மாதம் 13-ஆம் தேதி பிறந்தார். இவாது முன்னேர்கள் பல துறைகளில் பிரசித்தி பெற்றவர்களென்றும், அதன் பொருட்டு இவர் குடும்பம் நன்கு மதிக்கப்பட்டு வர்ததென்றும் கூறப்படுகிறது. பிறப்பினுல் ஸ்காட் லண்டு தேசத்துக்குச் சொர்தமானபோதிறும் இவரது அறிவால் உலகத்தார் அணேவருக்கும் இவர் சொக்தமானவர் என்று ''மாக்ஸ் பிளான்க்" என்ற மற்றுரு விஞ்ஞானி கூறுகெருர். ஆருவது வயதிலேயே இவரிடம் இருந்த கூர்ந்து கவனிக்கும் தன்மையைக் கண்டு அணேவரும் கியர்தார்கள். இளம் வயதிலேயே தாயாரை இழந்து விட்டதால் இவரது தந்தையாரே இவரை வளர்க்கும் விஷயத் தில் அதிகம் பங்கு எடுக்குமாறு கேரிட்டது. இவருக்குப் பாடங் கற்பிக்கும்படி இவாது தர்தை ஒரு உபாத்தியாயரை கியமித்தார். இவரது திறணே அறியாமல் பழைய முறையில் பாடங் கற்பிக்கத் தொடங்கினர். செறிதும் சிரத்தை காட்டாமல் இருந்ததால் இவரைத் துன்பு அத்தினர். கடைசியில் இவருக்குப் புத்தி மர்தம் கைவிட்டார். பின்னர் எடின்பரோவிலுள்ள பள்ளிக்கூடத்தில் சேர்க் கப்பட்டார். இவாது உடையைக் கண்டு மற்ற பையன்கள் கேலி செய்தார்கள். மற்றவர்களுடன் சகஜமாகப் பழகாத திஞல் இவர் துன்பத்திந்கு ஆளானர். இதன் பயகை இவரது கூச்சம் மேன் மேலும் விருத்தி அடைந்தது. கணிதத்தில் இவருக்கு சாதுர்யத்தைக் கண்டு இவாது உபாத்தியாயர்கள் மெச்சினர்கள். இதை அறிக்து இவரது தகப்பஞர் அவ்வூரிலுள்ள ராயல் லொலைடி யில் நடர்த கூட்டங்களுக்கு அழைத்துச் செல்லுவார். இவர் அக் கூட்டங்கள் ஒன்றில் ஒரு வியாசம் எழுதி வாகித்தார். அப்பொழுது இவருக்கு வயது பதினேக்து. அங்கத்தினர்கள் அனேவரும் இவாது புத்து கூர்மையை வியர்தார்கள். மேற்படிப்புக்கு கேம்பிரிட்ஜ் கலா சாஃக்கு அனுப்பப்பட்டார். அங்கு இவரது யோக்கியதையை மற்ற மாணவர்களும் ஆகிரியர்களும் உணர்ந்தார்கள். பிற்காலத்தில் பிரசித்தி பெற விருந்த மாணவர்களுடன் பழக்கமும், நட்பும் ஏற் பட்டது. அவர்களுடைய கன்மதிப்பைப் பெற்றுர். 'ராங்களர்' பரீணையில் இரண்டாவதாகத் தேறிஞர். படிப்பு முடிந்தவுடன் கேம்பிரிட்ஜிலேயே சிலகாலம் தங்கிக் கணித ஆராய்ச்சிகள் நடத்தி வர்தார். இக்காலத்தில் இவரது தகப்பளுரை இழக்க ரேரிட்டது. 1856-ஆம் ஆண்டில் ''போர்ப்ஸ்'' என்ற ஆசிரியரின் தூண்டு தலின் பேரில் அபெர்டீனிலுள்ள கல்லூரியில் உபாத்தியாயராக அமர்ந்தார். இங்கு முன்று ஆண்டுகள் தங்கி இருந்தார். கல்லூரித் தலேமை ஆசிரியரின் பெண்ணே மணம் செய்துகொண்டார். பின்னர் லண்டன் சர்வகலாசாஃயில் ஆசிரியராக நியமிக்கப்பட்டார். இவரது ஆராய்ச்சி கள் பெரும்பாலும் இக்காலத்திலேயே நடைபெற்றன. நிற்க, எழை மக்களுக்கென்று பிரசங்கங்கள் நடத்தி அவர்களுக்கு அறிவைப் புகட்டி வக்தார். ஐக்து ஆண்டுகளே இங்கு வேலே பார்த்தார். கோயின் பொருட்டு வேஃயிலிருக்கு விலகிக் கொள்ளுமாறு கேரிட் டது. சில ஆண்டுகள் கழித்துக் கேம்பிரிட்ஜில் பிரசித்தி பெற்ற காவண்டிஷ் ஆராய்ச்சி சாலே ஏற்பட்டவுடன் அதற்கு முதல் தலேவ ராக நியமிக்கப்பட்டார். இப்புதிய ஆராய்ச்சி சாஃபை மிகுந்த ஊக்கத்துடன் ஈடத்தி வர்தார். மறுமுறை ரோய் கண்டு நாற்பத் தொன்பதாம் வயதிலேயே இறர்தார்.

இவாது ஆராய்ச்சிகளின் மதிப்பைச் சுருக்கமாகக் கூறபடேத்து, இவாது மின்சார ஆராய்ச்சியின் விளேவாக ஒளி மின்கார்த்த தத்துவ மும் ஐன்ஸ்டைன் தத்துவமும் பிறர்தனவென்றும், இவரது பொருள் களின் மூலக சித்தார்தத்திலிருந்து மாக்ஸ் பிளாங்கின் பிந்துவாதம் பிறர்ததென்றும், காவண்டிஷ் ஆராய்ச்சி சாஃயின் முதல் தஃவ்வராக இருந்ததின் காரணமாக அணு அமைப்பின் விசேஷங்கள் பின்னிட்டுச் சுலபமாக அறிய சேரிட்டது என்றும் கூறுவது மிகையாகாது. மற்ற பிரசித்திபெற்ற விஞ்ஞானிகளுக்கும் இவருக்கும் ஒரு வித்தியாசம் உண்டு. இவர் கண்டுபிடித்தவை யாவும் பரிசோதஃனயின் வாயிலாக அல்லாமல் கணித முறையாலேயே அறியப்பட்டதாதலின் இவரது அபார புத்தி நட்பத்தை அவை நன்கு எடுத்துக் காட்டுகின்றன. முக்கியமாக, இயக்கத்திற்கும் வெப்பத்திற்குமுண்டான தொடர்பை யும், அதுபோலவே மின்சாரத்திற்கும் ஒளிக்கும் உண்டான தொடர் பையும் பற்றி இவர் கண்ட முடிவுகளே இவருக்கு என்ற மழியாப் புகழைக் கொடுத்தன. சுருக்கமாக அவை இரண்டையும் இங்கு கவனிப்போம்.

அடெர்டீனில் இருக்கும்பொழுது சனிக்கோளின் வீளயங்கீளப் பற்றிய ஆராய்ச்சிகள் நடத்திவந்தார். அவற்றினின்று பொருள் களின் மூலக வாதத்தில் இவரது கவனம் சென்றது. அவ்வாதத்தை நன்*ருகத்* தி*ருத்*தி அமை*த்து அதன் உதவிகொண்*டு பொருள்களின் பௌதிக வியல் குணங்கள் எல்லாவற்றுக்கும் காபணங்கள் காட்டிஞர். முதலில் இவ்வாதம் வாயுக்களின் பண்புகளே அறியவே கையாளப் பட்டது. மூலகங்களின் இயக்கத்திணையே வாயுக்களின் வியாபிக் கும் தன்மை, இறக்கம் முதலிய குணங்களுக்குக் காரணம் அறியப் பட்டது. வாயுளின் சூட்டிற்கும் மூலகங்களின் கதிக்கும் உள்ள இணேவை மாக்ஸ்வெல் கண்டு காட்டினர். மூலகங்கள் எண்ணற்றதா யிருந்தபோ திலும் அவைகளின் சராசரி கதியை கணக்கியலால் அறிய முடிவதைக் காட்டினர். உதாரணமாக நீரக மூலகத்தின் சராசரி கதி சாதாரணச் சூட்டிலும், பவன இறக்கத்திலும், செகண்டிற்கு 1,838 மீட்டர் எனக் கண்டார். சூடு உயர மூலகங்களின் கதி அதிகரிக்கின்ற தென்றும், சூடு குறையக் கதி குறைகின்றதென்றும் எடுத்துக் காட்டி ஞர். தனியியல் அளவில் பூஜ்ஜிய டிகிரீ சூட்டில் மூலகங்கள் எல்லாம் இயக்கத்தை முற்றிலும் இழந்து, அசைவற்ற நிலேயிலிருக்கவேண்டு மெனக் கண்டார். இவ்வாருகப் பொருள்களின் குணங்கள் அணேத்தும், முக்கியமாக வாயுப்பொருள்களேப் பற்றியவை வெகுவாக அறியப்பட் டன. இவற்றின் பயனுக ''மாக்ஸ்வெல்'' இவ்வாதத்தின் தர்தை பெனக் கரு தப்பட்டு வருகின்றுர்.

மூலக இயக்க வாதத்தை நிறுவிய பெருமையில் ''கிளாஸியஸ்'', ''போல்ட்ஸ்மான்'' என்ற இரு விஞ்ஞானிகளும் கிறிது பங்கு எடுத்துக் கொண்டார்கள். ஆனுல் மின்சாரத்துக்கும் ஒளிக்கும் உள்ள தொடர்பை எடுத்துக் காட்டிய விஷயத்தில் இவரது புகழ் தனியே சிறந்து விளங்கிற்று. இவரது ஒளி—மின்காந்த சித்தாந்தத் துக்கு முன் விஞ்ஞானிகளினைடையே இருந்த ஒளியின் இயல்பைப்

பற்றிய அறிவை இப்பொழுது சிறிது கவெனிப்போம். '' கியூட்டன்'' காலம்வரை ஒளி என்பது பிரகாசமான பொருளிலிருந்து வெளிவரும் சுறு துகள்களினுல் ஏற்பட்ட உணர்ச்சுயே என்று நிணத்து வந்தார் கள். ஆகவே, ஒளிக்கிரணங்கள் இத்தைகள்களின் பாதைகள் என்று கரு தப்பட்டன. ஆனல் ''யங்க்'' '' ஹைஜின்ஸ்'' முதலிய விஞ்ஞானி களால் ஒளிக்கொணங்களெல்லாம் அலேகளின் இயல்பைக் கொண்டிருக்க வேண்டுமென்று ஆராய்ச்சிகளிலிருந்து ஊகிக்கப்பட்டது. எனவே ஒளிக்கெரணங்கள் எண்ணற்ற துகள்களின் பாதைகள் என்ற சித்தாக் . தம் **கைவிடப்பட்டு, அவை**கள் ஒலியைப் போலவே அலேகளாகப் பாவவேண்டும் என்ற கொள்கை கையாளப்பட்டது. அலே இயக்கத் துக்குச் சில விசேஷ இயல்புகள் உண்டு. அஃவகள் பாழிடத்தில் செல்லாது. அவை பரவப் பதார்த்தயானம் ஒன்றிருந்தாக வேண்டும். அலேகள் செல்லுங்கால் பானத்தின் துகள்களெல்லாம் தமது சமஙில களினின்று விலகி ஆடிக் கொண்டிருக்கும். ஒவ்வொரு தைகளும் ஒரு செகண்டிலே இயற்றும் துடிப்புகளின் எண்ணிக்கை அந்த அஃயின் அடுக்கம் எனப்படும். தண்ணீர்ப் பசப்பின்மீது இலேசான பொருள் ஒன்றை மிதக்க விட்டால், அதனடியில் அலேகள் செல்லும்போது அப் . பொருள் மேலுங்கீழுமாக ஆடுவதிலிருக்து மேற்கூறியதை உணாலாம். திற்க, அவே இயக்கத்தில் இரண்டு வகை உண்டு. ஒவ்வொன்றிலும் யான த்தின் ஒவ்வொரு தகளும் தன்னிருப்பிடத்திற்கு இருபுறமும் தெறிது தூரம் சென்று, மீண்டு வர்து, துடித்துக் கொண்டிருக்கும். இத்துடிப்புகள் அலேகள் செல்லும் திசைக்குக் குறுக்காக கிகழ்ந்தால் கு றக்க‰கள் என்றும், அஃகள் செல்லும் திசையிலேயே கிகழ்ந்தால் ெட்டுவகள் என்றும் கூறப்படும். இவற்றிவிருந்து ஒளி அவேகள் எவ்வாருனது என்ற கேள்ளி பிறந்தது. சூரியனிடமிருந்து நம்மை அடையும் ஒளிக்கொணங்களெல்லாம் இடையே ஒரு யானத்தின் மூல மாகவே வந்திருக்க வேண்டுமென்றும், இந்த யானம் பதார்த்த இயல்பு கொண்டிருக்க வேண்டுமென்றும் முதலில் ஊகிக்கப்பட்டது. இந்த யானத்தைத் தான் விசம்பு என்று நாம் கூறுவது. எவ்வாறு பூமியி லிருந்து சூரியன்வரை ஒரு பதார்த்த யானம் வியாபித்து இருக்கக் கூடும் என்று முதலில் திகைத்தார்கள். ''யங்க்'', ''ஹைஜின்ஸ்'' இவர்கள் காட்டிய பரிசோகளேகளினல் அனுபவத்திற்கு முரணுக இருந்தபோதிலும் விசம்பு பதார்த்த யானத்தின் தன்மையையேகொண் டிருக்கிறது என்று மேற்கொள்ளப்பட்டது. அஃவகளில் இரண்டு வகை உண்டு என்று பார்த்தோம். திட பதார்த்தத்தில் இரண்டு வகை அலே களும் பாவக்கூடும். ஆணல் வாயுக்களில் கெட்ட‰கள் மட்டுமே பாவக் கூடும். காற்றில் ஒளி அலேகள் இரண்டாவது வகையைச் சேர்க்தவை. எங்கும் வியாபித்திருப்பதால் விசும்பு வாயுத் தன்மையைப் பெற் றிருக்க வேண்டுமென்றம், ஆகையால் ஒளி அலேகள் நெட்டலேகளாகவே . பாவ வேண்டுமென்றும் கருதப்பட்டது. சில ஆண்டுகளுக்குப் பின் னர் சில சோதணேகளின் பயனை ஒளி அலேகள் குறுக்கலேகளாகத் தானிருக்க வேண்டுமென்று ஏற்பட்டது. எனவே, விசும்பு திட பதார்த்தமாக இருக்கவேண்டுமென்று ஆயிற்று. இச்சங்கடத்தை கிவர்த்தி செய்ய முடியாமல் விஞ்ஞானிகள் திகைத்தார்கள். இதை '' மாக்ஸ்வெல்'' நிவர்த்தி செய்தார். இவர் மின்சார சம்பந்தமாக ஆராய்ச்சிகள் நடத்தி வந்தபொழுது '' பாரடே '' என்பவர் கண்டு . பிடித்**த ஊட்ட அ**ருவிகளேப் பின்னும் பரிசோதித்தார். இபண்டு கம்பிச் சுருள்களே எடித்து, ஒன்றை மற்றுென்றிலுள் வைத்து, ஒன் றில் ஒரு மின்னருளியை ஓடச்செய்து, அதைக் கிடீரென்று கிறுக் தினுல் மற்றுரு சுருளில் ஒரு மின்னருவி தூண்டப்படுவதே '' பாரடே''யின் ஆராய்ச்சியாகும். இம்மாதிரி தூண்டப்பட்ட அருவிகள் கம்பிச் சுருள்போன்ற முடிவுற்ற மண்டலங்களன்னியில் வெற்றிடத்திலும் ஏற்படக்கூடும் என்று ''மாக்ஸ்வெல்'' கண்டார். மின்னருவியும், கார்தப்புலமும் ஒன்றுக்கொன்று எப்பொழுதும் லம்பமாகவே இருக்குமாதலால், அவை கொமப்படி ஏற்பட்டு மாறு பிடங்களிலிருந்து பின்காந்த அலேகள் பாவிச் செல்லும் என்று கண்டார். மேலும் அலேகள் பாவும் திசைக்கு மின்புலம், கார்தப்புலம் இரண்டும் லம்பமாகவே இருக்கின்றதை உணர்ந்து காட்டிரை. ஆகையினுல் இம் மின்கார்த அலேகள் குறுக்கலேகள் என்பது தெளி வாகிறது. மேலும் கணக்கியலால் இவ்வலேகளின் கதி, ஒளி அலேகளின் கதியின் மதிப்பைப் பெற்றிருக்க வேண்டுமென்று காண்பித்தார். எ**னவே ஒளி அ**லேகள் மின்கார்**த அ**லேகளாகத்தானிருக்க வேண்டு . மென்று எடுத்துக் கூறிஞர். நூதனமாக விருந்த இக்கருத்தை விஞ் ஞானிகள் ஒப்புக்கொள்ளவில்லே. இவர் இறக்த பிறகுதான் இம் மின்கார்த அலேகள் பரிசோதனேயினைல் நிரூபிக்கப்பட்டு இவருடைய பெருமை உணரப்பட்டது. ஜெர்மனியில் ''ஹெம் ஹோல்ட்ஸ்'' என்ற விஞ்ஞானிக்குத் தூணே ஆசிரியராக விருந்த ''ஹொர்ட்ஸ்'' என்பவர் இதை கிரூபித்தார். இம் மின்கார்த அலேகளே உற்பத்தி செய்து காட்டி, அவை ஒளி அலேகளின் கதியையே பெற்றிருக்கின் மி தென்றும், ஒளி அலேகளேப் போலவே பொருள்களின் மீது மோதும் போது பிரதிபலனம், கோட்டம் முதலியவற்றை அடைகின்ற தென் றும் காட்டிஞர். எனவே '' மாக்ஸ்வெல்'' சித்தார்தம் அனேவராலும் ஒப்புக்கொள்ளப்பட்டது. விஞ்ஞானத்திற்கு இவர் செய்த பேருத வியைப் போற்றினர்கள். அதன் பயனுகத் தற்காலம் இவ்வலேகளேக் கொண்டு அயல்நாடுகளுக்குச் சமாசாரம், சங்கீதம் முதலியவற்றை அனுப்பக்கூடுமாதலால் நம்முடைய வாழ்க்கையில் ஏற்பட்ட மாறுதல் களே கிணேக்குங்கால், '' மாக்ஸ்வெல்'' பெரியாருக்கு நாம் என்றும் கடமைப்பட்டிருக்கிறேம் என்று சொல்வது மிகையாகாது.

॥ श्रीरस्तु ॥

FELICITATION ON THE OCCASION OF SHASHTYABDAPURTHI OF Raja Sir. Annamalai Chettiar, Kt.L.L.D.

By

Gayanapatu, Kirthanapatu, Abhinava Saraswathi, Kirthana-Saraswathi, Sangitha Samskritha Vidyaratna,

C. SARASWATHI BAI,

चेट्टिना डिघप-

श्री अण्णामलैनृपगुणस्तवः ॥

राजानो धृतशस्त्रचापिवशिखा युद्धे विधूतारयो विकान्ताः कृतदण्डशिक्षितजनाः सन्त्यन्यतो विश्वताः । राद्त्वण्णामल एव यस्य विपुला विद्यादिदानाहिता कीर्तिः शत्रुपदं मुमोष ऋजुता दण्डं निर्थं व्यथात् ॥ १ ॥

अण्णामलेन्द्र! भवताद्य चिरेण धन्याः पूर्वे भवत्कुरुभवा विमरुा वदान्याः । सङ्कर्षभ्तमित्वलं भवतैव येषां निर्वर्तितं घृतियुनेन जनोपकारि ॥ २ ॥

यद्यत्कृतं भवदनर्घकुरुं प्रसूतैः
पूर्वेर्हि दीनजनताश्रमभारहारि ।
तत्सर्वमद्य भवतः सकलेष्टदायिविद्यालयस्य नियमादभवत् सुपूर्णम् ॥ ३ ॥

जानीमहे सुकृतिनो बहुवित्तजातः विश्राणनाकिलतदेववरालयांस्तान् । वाग्देवताविद्धतिभूमिविधानदक्षो नान्यः परं श्रुतिगतो भवता सदक्षः ॥ ४ ॥

आयोजिता वणिगधीश! दशाधिनाथाः भावत्कजनमसुदिने सुकृतैः शुभाढ्याः । यत्तेऽपि तावकसुकर्मयशोविशुद्धाः "सौम्याः शुभाः" इति नुतिं स्तुतिभिर्छभन्ते ॥ ५ ॥

प्रत्येमि ते म्रहवरा भवतां क्रतज्ञाः
स्वस्वासु जातकदशासु विहृत्य पूर्णम् ।
शानित सुखं च दृढतामि दीर्घमायुः
सन्तोषयेयुरमुतोऽपि सदा प्रसन्नाः ॥ ६॥

देयाचिरं त्रिविधगीतकलाधिपस्ते
सौवर्णचिन्मयसभानटनाधिराजः ।
अद्योद्धृतद्भविडवाङ्मयगीतविद्याः
सम्पोषकाय भवते विमलां सुकीर्तिम् ॥ ७ ॥

साम्रेण वर्षशतकेन समैः समृह्याः

षष्ट्यां समासु भवता कलिता हि धर्माः ।
तेषामनर्धमितं फलमश्नुवानः

जेजीयतां सुकुशलो विहितापदानः ॥ ८॥

आ शैशवाद्भवदमन्दक्कपालताढ्य-मन्दारशीतलतटे कलिताश्रया ते । या गानकीर्तनसमर्थसरस्वतीबाय् सा प्रार्थयत्यखिलशं गिरिशं चिरायुः ॥ ९ ॥

इति शम्।

॥ श्रीरस्तु ॥

'अण्णामलैविश्वविद्यालयं ' प्रतिष्ठापकानां डाक्टर् राजा सर् अण्णामलै श्रेष्टिमहाशयानां षष्टिवर्षदिनोत्सवे वितीर्णा प्रशस्तिपत्रिका ॥

BY

SANSKRIT DEPARTMENT

(Annamalai University)

आसन्पूर्व चोलदेशे नरेन्द्राः शम्भोरशौरेश्चालयान्निर्मिमाणाः । आम्नायानामङ्गविद्यायुतानामभ्यासार्थे पाठशाला विशालाः ॥ १ ॥

स्थ नृपतिषु संज्ञामात्रशेषेषु जीर्यत्स्वमरपरिबृढानां सद्मस्चावचेषु । जलिषदुहितृरङ्गस्थानभूतात्मदेहा अधिगतमतिसारा नागरश्रेष्ठिवर्याः ॥ २ ॥

धर्मे प्रशस्तिमह सङ्कलयन्त एते स्वोपार्जितार्थनिचयान्नियतांशमेकम् । धर्माभिवर्धनविधौ विनियोजयन्तः प्रापुर्यशोऽधिमहि धिकृतपूर्वराजाः ॥ ३ ॥

जातस्तेषामन्ववाये यशस्वी रामस्वामिश्रेष्ठिवर्ये। वदान्यः । आङ्हीं भाषां काङ्क्षतां माणवानां विद्याशात्मां स्थापयामास हृद्याम् ॥४॥

भात्रा तस्य कनीयसा निजयशोव्यालीढविश्वंभरे-णार्वाचीनचिरन्तनाध्वसु समं नैपुण्यमासेदुषा । 'राजा', 'सर्' विरुदोल्लसद्विबुधराजाण्णामलैश्रेष्ठिना विद्यावृद्धिविधौ व्यपेतसदृशा विद्वद्विहारास्पदम् ॥ ५ ॥ श्रीमानाक्षीनामाङ्कितविद्यावसतिरत्र निरमायि । सार्धे द्राविडवाणीगैर्वाण्यध्यापनादिशालाभिः ॥ ६ ॥

प्रत्नासु रीतिषु गुणा न न सन्ति तद्ध-नुत्नास्वतस्त इतरेतरसंक्रमार्हाः ।
इत्याकल्य्य घिषणोपमधीरिहामूः
सर्वाश्चकार मिलिता उचितज्ञ एषः ॥ ७ ॥

आरात्सभापतिपदाम्बुरुहाद्गृहीत-भाष्यप्रवक्तु फणिराजमहार्घभूषात् । विद्यानिवेशनमिहैवमिवाधिकर्त्रा वैदुष्यसारनिकषैकदृशाभ्यमानि ॥ ८ ॥

तद्यशःपोतरूपोऽयं विश्वविद्यालयो भुवि । जीयादण्णामलैश्रेष्ठिधुरीणेन शतं समाः ॥ ९ ॥

जयित शुभतमानां जन्मभूमिर्गुणानां पर इव परिपाकः पुष्कलानां कलानाम् । सुरतरुरिव भौमस्संश्रितानां जनानां बुधजनबहुमान्योऽण्णामलैश्रेष्ठिवर्यः ॥ १० ॥

त्यागाय श्रीरर्जनायैव विद्या
सर्वे द्यायुः पुण्यकार्योधमेव ।
इत्थं बुद्धिः सर्वथा ते गुणाञ्धे !
जाता तस्माद्धन्य एकस्त्वमेव ॥ ११ ॥

यस्योत्प्रेक्षा प्रगुणधिषणैरप्यनिर्णीतसीमा द्वष्टान्तो यः सुद्धदुपकृतेरहेतां चार्हणानाम् । पर्यायोक्तं भुवि धनपतेः सद्गुणानां समाधिः विद्योद्धारे धृतपरिकरः सारसंसृष्टिदृष्टिः ॥ १२ ॥

श्रीमत्त्वं धीमत्त्वं वदान्यता सौमनस्यगाम्भीयं । प्रियभाषितेति विरलाः समवायन् त्विय गुणाश्चित्रम् ॥ १३ ॥

श्रीमनेििष समाः शतमस्मान्शाधि प्रकाश्य सौजन्यम् । विद्यावीरुदुपद्नान् निद्नान् रचयन्नुपस्कारैः ॥ १४ ॥

गीर्वाणवाणीपरिषद्दत्तेयं स्निमज्जरी । प्रमोदाद्गृह्यतां राजन् ! पष्टिवर्षदिनोत्सवे ॥ १५ ॥

।। श्री चित्सभेशाय नमः ।।

श्रीमतां विश्वविद्यालयप्रतिष्ठापनादिसद्धर्माचरणतत्पराणामिखल्लोकाभिनन्दः नोयगुणगणविभ्षितानां राजा, सर्, डाक्टर्, इत्यादि विरुद्विशिजितानां नागर-श्रेष्ठिकुलावतंसायमानानामण्णामलेश्रेष्ठिमहाशयानां षष्टितमाञ्दपूर्तिमहोत्सवसमये सबहुमानं सामोदश्च समर्पितानि मङ्गळाशंसनरूपाणि पद्योपहारकुसुमानि ।

BY Pandit S. RAMASUBBA SASTRI

सत्कार्येष्विलिखेषु यस्य परमा प्रीतिस्समुद्धासते वित्तानां निचयः परोपकृतये भोगाय नैवात्मनः । मान्यो यश्च सुधीवरैर्बुधवरो राजेति विख्यातवान् सोऽयं राजत् सान्वयश्चिरतरं भूमौ महाधार्मिकः ॥ १ ॥

भूमौ सन्ति सहस्रशः प्रभुवराः नैते परेषां कृते स्वरूपं वित्तमपि प्रदाय जनुषः साफल्यमातन्वते । अस्माकं प्रभुवर्य एष महितो राजा सरण्णामले श्रेष्ठी वित्तचयं जनोपकृतये दत्वातिसंशोभते ॥ २ ॥

ऐश्वर्येण न सङ्गतं कचिदिप ज्ञानं धरण्यामि-हेरयेवं भाषणमर्थहीनवचनं कुर्वाण एषोऽधुना ।

राजा सर् विरुदोज्वलः परिबृदो धीमान्महीमण्डले । श्रेष्ठी सर्वकलालयं निरुपमं निर्माय बाभात्यहो ॥ ३ ॥ राजा सर्वकलालयाच्यतनयां भूषाविशेषोषमैः विद्वद्भिः परिभूष्य सर्वजगतामीशाय भर्त्रे मुदा । दःवा लोकमहोपकारमकरोद्धन्यस्य तस्याधुना षष्ट्यव्दोत्सवमादराद्वयममी सामोदगाशास्म हे ॥ ४ ॥

राजेति विख्यातवतो वदान्यभूषायमाणस्य महाशयस्य । षष्ट्यब्दपूर्त्याख्यमहोत्सवोऽयं सूते परां प्रीतिमुपाश्रितानाम् ॥ ५ ॥

भक्तस्य चाण्णामलनामवेयमाविश्रतः श्रेष्ठिवरस्य शभ्मुः । श्रेयोऽनिशं शाश्वतमादधातु जीयाचिरं सान्वय एव राजा ॥६॥

जयतु जयतु राजा धार्मिकामेसरोऽयं जयतु जयतु विद्यामिन्दरं तत्प्रतिष्ठम् । जयतु जयतु षष्ठो जार्ज् महासार्वभौमः । जयतु जयतु देशो भारताभिरूय एषः ॥ ७ ॥

गुभम्

॥ श्रीः ॥

अण्णामले विश्वविद्यालयप्रतिष्ठापकानां डाक्टर् राजा सर् अण्णामले श्रेष्ठिमहाशयानां पष्टितमे जन्मदिनोत्सवे समर्पिता मङ्गळाशासनपत्रिका

BY

V. K. SESHADRIACHARYA, Siromani & Vidvan.

मान्यत्वं प्रभुता च यत्र मिलिते तत्र स्मयस्सन्ततं तेनाध्मातमनास्समीक्षितुमपि स्वोज्जीविनो नेहते । ईहकापुरुषादताध्विन पुनर्वेदेशिको राजसे 'वर्धन्तीं ' भवते शुभां प्रतिसमं दद्याद्धरिस्सोख्यदः ॥ १ ॥

दाक्षिण्याम्बुनिधिर्दयाशिशिरितस्वान्तः क्षमाशेवधिः स्वीयास्तोकवदान्यतागुणयशःस्फीताखिलाशामुखः । स्वं प्राप्येत उपर्युपर्यपि यशो जीवेस्समाइशाश्वती-रित्येवं किल सङ्गताः प्रतिकलं सम्प्रार्थयामो हरिम् ॥ २ ॥

यः सूनुर्भजते निजेर्गुणगणमिन्यैस्युसम्मान्यतां तेनैवोपकृतं महत्स्विपतुरित्यूचुः पुरा सूरयः ।

कुंवन् तद्वचनं भवानवितथं संश्लाघ्यमानो बुधैः जीयादित्यनुबद्धसम्पुटकरैरसम्बार्थ्यते श्रीनिधिः ॥ ३ ॥

किं भाग्यं व्यद्धादमुष्य जनको जन्मन्यतीतेऽप्यहो एवं तावकहृचकर्मनिवहैर्लोकेन विस्मीयते । युक्तस्त्वं सहधर्मिणीतनुभवे राजा सर् अण्णामले श्रिष्ठिन् एधि समाइशतं भवतु चैतादृष्ट्महस्ते मुहुः ॥ ४ ॥

॥ श्रीः ॥

डाक्टर् राजा सर् अण्णामलैश्लेष्ठिवर्याणां विश्वविद्यालयप्रतिष्ठापकानां षष्ट्यब्द्रात्सवे पण्डितश्लीनिवासाचार्येण सादरं समर्पितेयं पद्यकुसुमावित्रः

BY

Pandit K. SRINIVASACHARI

अण्णामलैश्रेषिठवरस्स जीयादाचन्द्रतारं भुवि सान्ववायः। विद्याभिवृद्धौ चिरदीक्षितं यमाहुर्बुधा भारतभाग्यराशिम्॥ १॥

> सुरतरुरिव भौमद्दरुष्ठाघनीयो बुधानां वितरित बहुशाखं कांक्षितं श्रेष्ठिवर्यः । विमलतरचरित्रस्सद्भुणाम्भोनिधिर्य-स्स जयतु निजधमे पालयन् दीर्घकालम् ॥ २ ॥

वित्तस्य धर्माचरणं प्रयोजनं न भोग इत्येव मनीषया बुधः । सर्वे धनं धर्मपथे मुदान्वितः प्रकाशतेऽयं विनियुज्य निर्भरः ॥ ३ ॥

अण्णामले श्रेष्ठिकुरुपदीपो विभाति विरूपातविशुद्धकीर्तिः । यदीयविद्यालय एष लोके विज्ञानराशि बहु विस्तृणीते ॥ ४ ॥

यं वै भवान् पालयते स्वधर्मे स वै भवन्तं भुवि माननीयम् । पुष्णाति सम्यग्विदुषां वरेण्यमित्थं वयं निश्चिनुमो वदान्य ! ॥ ५ ॥ लोके हि सर्वे प्रथिताः पुमर्था ज्ञानैकसाध्या इति मन्यमानः । निर्माय विज्ञानविवृद्धिहेतुं विद्यालयं श्रेष्ठिवरश्चकास्ति ॥ ६॥

> आ सेतोर्लोकविष्यातादा च गौरीपितुर्गिरेः । ख्यातो विद्यालयो यस्य जीयात्स शरदां शतम् ॥ ७ ॥

राजा सर् विरुदाङ्कितो विजयते श्रीमान् सुशीलस्सुधीः प्रख्यातो निजसच्चरित्रनिवहेनौदार्यवारांनिधिः । विद्यामन्दिरमद्भुतं सुवि यशोविद्योतिताशासुखं निर्माय प्रसुरद्य भारतसुवो मूषायते धार्मिकः ॥ ८ ॥

कामकोघिवविर्जितो सुवि लसत्यण्णामलैश्रेष्ठिराट् सत्त्वस्थैरभिनन्दनीयसर्गणस्सौजन्यभूमिः प्रसुः । षष्ट्यञ्दोत्सव एष तस्य चलति प्रज्ञानिधेरद्भुतः श्रीमानद्य तनोतु भाग्यमतुलं प्रख्यातभूमा हरिः ॥ ९ ॥

षष्ट्यञ्दपूर्तेर्महितोत्सवोऽयमुपस्थितक्ष्रेष्ठिवरस्य तस्य । गोविन्दराज्ञित्रश्रतपारिजातिरश्रया समं मङ्गळमातनोतु ॥ १० ॥

॥ संस्कृतविद्या राजानश्च ॥

॥ पण्डितराजः वे. सुब्रह्मण्यशास्त्री ॥

भाषान्तरविरुक्षणैः प्रकृतिपत्ययादिसंस्करणैः संस्कृतत्वादियं वाणी संस्कृत-व्यपदेशं भजते । आचार्यदण्डो प्राह—'संस्कृतं नाम दैवी वागन्वाख्याता महर्षिभिः '। इति । देवैर्व्यविह्यमाणा देवभाषेत्यभिधीयते । देवानुद्दिश्य क्रिय-माणं कर्म अनया भाषया निर्वर्त्यते इत्यतोऽप्येनां देववाणीमामनन्ति । यद्वा देवा नामार्याणां श्रेष्ठानां भाषा देवभाषा । अथवा सर्वत्र दीव्यन्ती भाषा देवभाषा । भाषापरिगणने त्वियं प्रथमं स्थानमारोहति । तथा हि । सर्वे हि लोकः उदरपूरणे व्याप्टतः तदर्थे अथवा विनैव हेतुं धनं कांक्षमाणः तत्संपादने कृतप्रयत्नो दृश्यते । भुञ्जानं सुखिनमात्मानं कृतकृत्यं मन्यते । न चिन्तयित कोऽहं कथं जातः कुत्र वा गमिष्यामीति । एवं विवेचनविधुराः पश्वादिसमानयोगक्षेमाः । यथाहुः भगवत्पादाः-' खादते मोदते नित्यं शुनकः सूकरः खरः । तेषामेषां विशेषः को वृत्तिर्येषान्त तैः समा ॥ ' इति । ईदशान्त्रमेयानेव प्रतिपादयति संस्कृतप्रन्थराशिर्वेदप्रमुखः । श्रुयते हि बृहदारण्यकोपनिषदि — जनकं याज्ञवल्क्यः पृच्छति इतो विमुच्यमानः क गमिष्यसीति, जनको ब्रूते नाहं तद्भगवन्वेद यत्र गमिष्यामीति । याज्ञवल्क्यः पुनराह-अथ वै तेऽहं तद्वक्ष्यामि यत्र गमिष्यसि इति । अध्यात्मविचारेण हि मनुष्यः मनुष्यो भवति । नद्ययं विचारः वेदेषु तदुपबृहणेषु तत्तास्पर्यनिर्णायकेषु तदुपो-द्बरुक्युक्तिनिकरप्रतिपादकेषु च संस्कृतप्रन्थेष्विव अन्यभाषामयप्रन्थेषु विततो वर्तते । अभिनिवेशविरहिणाञ्चात्र न बहु वक्तब्यमस्ति । न केवलमध्यारमविचार

एव विततः अपि तु यो यः पुरुषेणार्थ्यते पुरुषार्थः चतुर्विधः तस्य सर्वस्याप्युपायः विस्तरेण प्रत्यपादि । न तदस्ति पुरुषाभिलिषतसाधनं यन्न प्रतिपादितं वेदादिषु संस्कृतप्रन्थेषु ।

अत एव पाश्चात्यदेशीयेभ्यः भारतदेशे राजकीयाधिकारिपदे नियुक्तेभ्यः ततः भारतदेशं पति प्रस्थितेभ्यः तद्देशीयगीर्वाणवाणीपवीणेः माक्स्मुल्रमहाशयैः इत्थमुपादिस्यत । संस्कृतेनैव भारतदेशस्य महनीयता, राजकार्येन्यापृतैरि भवद्भिः संस्कृतभाषा अभ्यसनीया, तत्परिचय एव भारतदेशवासस्य मुख्यं प्रयोजनमिति । केवलं कथाप्रतिपादका प्रन्थाः सक्कत्पिठता एवानन्दं जनयन्ति । द्वितीयवारं पिठ-तास्तृद्धेजयन्ति । नैवं भारतरामायणेतिहासकाव्यानि । पुनः पुनः पर्यालोच्यमा-नानि विजातीयमाह्यादं जनयन्तीत्यनुभवसिद्धं सहृदयानाम् । कश्चन वैदेशिकः पञ्चदशवत्सरेभ्यः पूर्वे पठितं नलोपारुयानमद्य परामृश्यमानमभिनवार्थश्रोधनेनानन्द-तुन्दिरुयति मामिति लिखति । भाषाशास्त्रस्यात्यन्तमुपकरोतीयं संस्कृतभाषेति सा महनीयेति तच्छास्त्रविशारदः प्राह । पाश्चात्यभक्तेष्वास्माकीनेषु तद्क्तिरेव परमं प्रामाण्यं भजते इति तद्किरादियते । यक्षानुरूपो बलिरिति हि न्यायविदः । अपि च संस्कृतिवद्या विनयं ददाति आचार्ये देवे च भक्तिं जनयति। अस्मद्देशक-लालयेषु असकृत् कलाशालास्तम्भनरोगः विद्यार्थिनो बाधते । अविनीतिमूलक-श्चायं रोगः तद्विरोधिसंस्कृतविद्यावद्भयो बिभेति । किं बहुना उपसर्जनतया संस्कृत-मधीयाना अपि विद्यार्थिनः न तेन रुग्णाः भवन्ति । विद्या ददाति विनयमिति लक्षणलक्षिता संस्कृतविद्यैव नान्येत्यपि निर्धारयितं पार्यते । तदेवं समालोचितं किञ्चिदिव संस्कृतविद्याविषये।

अथ राज्ञां संस्कृतविद्यासंबन्धः प्रस्तूयते । अपूर्वा विद्याः राजस्वेव निगृहिता आसन् । तथाहि — छान्दोग्योपनिषदि श्रूयते — स्वेतकेतुरारुणेयः पाञ्चालराजसभामेयाय, तत्र राज्ञा प्रवाहणेन जैविलना अपि भवान् पित्रान्तिष्टः इति प्रष्टः द्वेतकेतुः अनुशिष्टोऽस्मीति अव्रवीत् । ततः राजा तं पप्रच्छ पञ्च प्रश्नान् (१) वेत्थ यदितोऽधि प्रजाः प्रयन्तीति (२) वेत्थ यथा पुनरावर्तन्ते इति (३) वेत्थ पथोर्देवयानस्य पितृयाणस्य च व्यावर्तना इति (४) वेत्थ यथासौ लोको न संपूर्यते इति (५) वेत्थ यथा पञ्चम्यामाहुतावापः पुरुषवचसो भवन्ति इति । नैकोऽपि प्रश्नः समाहितस्तेन । ततः क्किन्नचेताः द्वेतकेतुः स्विपृत्तमीपं गतः नाहं भवता सम्यगनुशिष्टः यतः मां राजन्यवन्धुः पञ्च प्रश्नानपाक्षीत् नैकस्याप्युत्तरमवेदिषित्यवादीत् । ततश्च पिता मयाप्ययमधी न विदितः इत्यभिधाय पुत्रेण सह तं वेदितुं राजनिकटं प्राप । तं ह चिरं वसेत्याज्ञापयाञ्चकार । ततः यथेयं न प्राक् त्वतः पुरा विद्या ब्राह्मणान्गच्छति । तस्मात् सर्वेषु लोकेषु क्षत्रस्यैव प्रशासनमभूदिःयुत्तवा तां विद्यामुपदिदेश इति । तां पञ्चाग्निवद्यामामनन्ति औपनिषदाः ।

अन्यो राजा तत्त्वविचारकृतृह्छी विदेह्यिपः तत्त्वद्रिश्चां मेछनं कारियत्वा तेषां संवादश्रवणेन करतेषु प्रशस्तो विद्वानिति ज्ञात्वा तत्सकाशात्त्त्वं विदित्वा तस्मै गुरवे राज्यं ददौ आत्मानश्च दासभावमनयत् । श्रूयते हि-बृहदारण्यकोपिन षदि—' जनको ह वैदेहो बहुदक्षिणेन यज्ञेनेजे । तत्र कुरुपञ्चालानां ब्राह्मणा अभिस्मेता बभुवः । तस्य ह जनकस्य वैदेह्स्य विजिज्ञासा बभूव कःस्विदेषां ब्राह्मणानामनूचानतमः इति । स ह गवां सहस्रमवरुरोध दश दश पादा एकैक्स्याः शृङ्गयोरावद्धाः बभुवः । तान्होवाच ब्राह्मणा भगवन्तः यो वो ब्रह्मिष्ठः स एता गा उदजतामिति ।' ततो याज्ञवल्क्यः स्वशिष्यं ता गाः स्वाश्रमं नेतुमाज्ञापयामास । सर्वेऽपि विद्वांसः तं तं प्रमेयं पप्रच्छुः । सर्वेऽपि प्रश्नाः समाहिता याज्ञवल्क्येन । ततो राजा याज्ञवल्क्यमुपसद्य विचारसरण्या न केवलं श्रद्धया तस्मात्त्वं विजज्ञौ । अन्ते इदं श्रूयते—' एष ब्रह्मलोकः सम्राडेनं प्रापितोऽसीति होवाच याज्ञवल्क्यः ।

सोऽहं भगवते विदेहान्ददामि माञ्चापि सह दास्यायेति '। अन्यो ब्रह्मिष्ठः काशि-राजः अजातशत्रुः तत्त्वविचारकुत्ह्ली जनकायास्यतीव समुपलभ्यते बृहदारण्यके दसबालाकिहीनुचानो गाम्ये आस । स होवाचाजातशत्रुं काश्यं ब्रह्म ते ब्रवाणीति । स होवाचाजातशत्रुः सहस्रमेतस्यां वाचि दद्मः जनको जनकः इति जना धावन्ति ' इति । ततः अन्ते गाम्येंकं न ब्रह्मेति प्रतिपाद्य राजा गाम्यमुपदिदेश ब्रह्मेति ततः प्रतीमः । एवं ब्रह्मिष्ठाः विचारकुशलाः राजानः आसन् । अत एव राजविद्या राजगुह्यमिति गीतापि संगच्छते ।

ततश्चार्वाचीना र।जानः प्रबन्धार आसन् भोजहर्षप्रभृतयः । अन्ये च संस्कृ-तविद्याभिवर्धने बद्धश्रद्धा अभूवन् । प्रायेण काव्यस्य वा शास्रमन्थस्य वा प्रणेतारः तं तं राजानमाश्रिताः तद्भिसन्ध्यनुसारेण निबन्धानकार्षुरिति तद्भन्थेभ्यः स्पष्टं प्रतीमः । किं बहुना-मौहम्मदीया अपि राजानः केचन कृतसंस्कृतपरिचया इत्यै-तिहासिका वद्नित । तैर्विशेषतः पोषिताः जगन्नाथप्रभृतयो विद्वांसः प्रन्थरत्नानि विरचयामासः । यदाह जगन्नाथः- 'दिल्लीवल्लभपाणिपल्लवतले नीतं नवीनं वयः' । इति । तादृशप्रवन्धप्रणेतुरहितेऽप्यिन्मन्पाश्चात्यशासनकारुं पुरातनप्रन्थाः कचित् कचित्पा-ट्यन्ते । पाश्चात्यसरणिमनुस्तय तत्तद्भन्थान् प्रन्थकारांश्चाधिकृत्य विमृशन्तः तेषु तेषु राजकीयस्थानेषु नियमिताः संस्कृतविद्यां पालयन्ति । अरसिकाः कतिपग्रे अन्भिज्ञाः निकिम्पवाणीस्वरूपस्य तामवजानन्ति । परन्तु द्रविडदेशाधीशाः पूर्वे संस्कृताभिमानिनः मन्त्रवाद्मणाध्येतृणामेव दार्शनिकानां राजसभायां प्रवेशं कल्प-यामासुः । दर्शनाध्यापकाः वेतनदानेन विद्यार्थिनश्चाशनादिदानेन पोषितास्तैः राज-भिरिति स्पष्टं प्रतीयते । चोलनृपतेः राजराजस्य साहाय्यात् विद्वद्भिः नानार्थकोशः संपादितः । भारतादिपुराणार्थान् यथा सर्वे जना जानीयुः तथा चोलनृपतिभिर्निय-मिताः विद्वांसः पुराणार्थान् प्रकटीचकुरिति च ऐतिहासिका विमर्शकाः राजकीय-शिलाशासनप्रमाणपुरस्सरं निरूपयन्ति ।

ईहक्षेऽपि विषमे समये अञ्चनावासादिदानेनोपकृतानां विद्यार्थिनां तत्तद्दर्शन-प्रवीणैः विद्वद्भिः सर्वदर्शनाध्यापनव्यवस्थापनया संस्कृतविद्यां परिपालयन्तः वदान्याप्रगण्याः एतत्सर्वकलालयप्रतिष्ठापका राजानः प्राचीनानेतद्देशाधीशान् कस्य वा न स्मारयन्ति । दृढं विश्वसिमि—धुरभारतीयं पुरातनं स्थानं किं वा ततोऽप्युन्नतं स्थानमिधरोक्ष्यित राजादरेणेति शिवम् ।

॥ भ्रीः॥

॥ धर्म भूतं ज्ञानम् ॥

V. K. SESHADRIACHARYA. Vidvan: Siromani.

श्रीविशिष्टाद्वैतसिद्धान्तिनिष्ठैरभ्युपगतस्य प्रतितन्त्रभूतस्य धर्मभूतज्ञानस्याः वश्यम्भावे प्रमाणानि युक्तयश्च प्रदर्श्यन्ते ।

> ' मिथो भेदं तत्त्वेष्वभिरूपति भेदश्रुतिरथो विशिष्टैक्यादैक्यश्रुतिरिप च सार्था भगवती । इमावर्थी गोष्तुं निखिरुजगदन्तर्थमयिता निरीशो रुक्ष्मीशस्थ्रुतिभिरपराभिः प्रणिद्धे ॥ '

इति भेदाभेदश्रुतीनामबाधितमुख्यार्थवर्णनं घटकश्रुत्यनुसारेण यथा कृत-मेभिः, एवमात्मनश्चेतनत्वं चैतन्यरूपत्वं च श्रुतिभिः कथितमविरोधेन समर्थितम् ।

कैश्चित् ज्ञातुस्त्वयंप्रकाशत्वेन चैतन्यरूपत्वपतिपादिकाश्श्रुतीरविगणय्य जडरूपस्यात्मन आगन्तुकज्ञानाश्रयत्वमात्रमङ्गीकृतम् ।

अन्यैश्च ज्ञानस्वरूपत्वमात्रमात्मनोऽभ्युपगम्य ज्ञानाश्रयत्ववादिनीनां श्रुतीनां यथाकथित्रत्रयनं कृतम् ।

विशिष्टाद्वैतिभिस्तु 'विज्ञानं यज्ञं तनुते ' अत्रायं पुरुषस्स्वयंज्योतिभवति ' इत्यादिभिः श्रुतिभिर्यथा ज्ञानस्वरूपत्वमात्मनः, एवं 'न विज्ञातुर्विज्ञातेर्विपरिलोपो विद्यते ' अनुच्छित्तिधर्मा ' इत्येवमादिभिज्ञीनाश्रयत्वमप्यभ्युपगतम् ।

कथमनयोधिमत्वधिमत्वयोर्मिथोविरुद्धयोरेकत्र सम्भव इति चेत्— तथाऽनभ्युपगमात् ; धर्मिभूतं ज्ञानमन्यत् , धर्मभूतश्चान्यदित्यभ्युपगमेनाविरोधात् ।

अहमधेभूतः प्रत्यक्छब्दवाच्यस्स्वयंप्रकाशत्वेन ज्ञानशब्दाभिरुप्य आत्मा ज्ञानाश्रयत्वेन धर्मिभूतज्ञानमिति व्यविद्वयते । 'अञ्चु गतिपूजनयोः' इति गत्य-धंकानां बुद्धधंकत्वेन प्रतीपमञ्चति (यथा घटादयस्त्वभिन्नेन ज्ञानेन भासन्ते, न तथाऽयमात्मा ; किन्तु तिद्वपरीतं स्वात्मकज्ञानेनैव भासते) इति व्युत्पत्त्या स्वस्मै स्वयं भासमानत्वेच प्रत्यक्छब्दाभिषेयो भवति । स्वस्मै स्वयं भासमानत्वञ्च स्वप्यक्षाश्यस्यकर्तृकव्यवहारादिप्रयोजनभाकृत्वं । अस्य प्रकाशश्च 'अहं ' इति । अस्याञ्च प्रतीतौ प्रत्यक्त्वमनुकूरुत्वमेकत्वञ्च विषयीकियन्ते । अहमिति स्फुरणञ्च स्वापादिषु सर्वायु दशास्वनुवर्तते । 'सुलमहमस्वाप्सं ' इति प्रतीतिस्त्वापसमकारिकं सुखमवगाहते ; यथा 'मन्दमगच्छं ' 'मधुरमगायं ' इति प्रतीती गमनगानसमकारिकं एव मान्द्यमाधुर्ये अवगाहेते । सुप्तोत्थितस्य पुरुषस्य 'सुषुप्तौ मामप्यहं न ज्ञातवान् ' इति परामर्शश्च तदानीमहमर्थस्यात्मनोऽविशदस्फुरणादेव । तथा चोक्तं—

' ज्ञातृत्वं ज्ञानरूपत्वं द्वयं श्रुत्यैव गम्यते । स्वरूपं ज्ञायते सुप्तौ वैशिष्टधन्तु न बुद्धचते '॥

इति । जागरदशायां यथा ब्राह्मणत्वादिवाह्यधर्मविशिष्टतया सुखित्वा-द्यान्तरधर्मविशिष्टतया च सकलेतरव्यावृत्ततया प्रतिमासो भवति, तथा सुषुप्ति-दशायामेतादशानेकविशेषणविशिष्टतया इतरव्यावृत्ततया च स्फुटप्रतिमासो न भवति । 'सविशेषणे हि विधिनिषेधौ विशेषणमुपसङ्कामतः सति विशेष्ये वाधे ' इति न्याये-नाहमर्थप्रकाशनिषेधस्याशक्यत्वे प्रकारीभूतवर्णाश्रमादिवैशिष्ट्यप्रकाश एव निषिध्यत इति वक्तव्यम् । अत एव श्रुतिरपि 'नाह खल्वयमेवं सम्प्रत्यात्मानं जानात्ययमह मिंस ' इति; न तु ' अहमिति न जानामि ' इति श्रुतिरूपलभ्यते । तथाच सुषुता-वात्माज्ञानवचसामाकारान्तरवैशिष्ट्याज्ञानपरत्वेनोपपत्त्या तदानीमप्यहमर्थावभासो-ऽप्रतिहतः ।

प्रातश्चत्वरं दृष्टवान् पुरुषोऽन्येन प्रातश्चत्वरे गजदर्शनं पृष्टः, प्रातश्चत्वरे गजादर्शनेन तस्य, प्रतियोग्यस्मरणेन तदभावस्य चाप्रत्यक्षेऽपि योग्याननुस्मरण- स्विलिङ्गेन चत्वरे गजाभावं वदित । तस्य च प्रातश्चत्वरानुभवाभावे तत्र गजाभावस्य वक्तुमशक्यत्वाद्यथा चत्वरानुभवोऽभ्युपेयते, एवं सुषुप्तावहमर्थाप्रकाशे तत्र तदानी ज्ञानाभावो वक्तुं न शक्यते । तस्मादहमर्थस्यात्मनस्स्वयंप्रकाशत्वेन ज्ञान- त्वम् । आहुश्च—

' श्रुतिप्रत्यक्षसंसिद्धे ज्ञातृत्वे ज्ञानताश्रुतिः । नेया तद्गुणसारत्वात्स्वप्रकाशतयापि वा ' ॥ इति ।

यथा दीपस्त्वयं प्रकाशते, स्वप्नभया चान्यान् प्रकाशयित, तथा आस्मा स्वयं प्रकाशते, स्वप्नभाभृतेन धर्मभूतज्ञानेनान्यानिप प्रकाशयित । प्रभाश्रयस्य दीपस्यौज्ज्वल्यं प्रात्यक्षिकं, एवं ज्ञातुरि । प्रकाशस्वभावो दीपो यथा स्वधर्मभूतप्रभानपेक्षप्रकाशः, तथा ज्ञातािप स्वधर्मभूतज्ञानानपेक्षप्रकाशः । यथा च दोपः विषयप्रकाशनक्षमोऽपि स्वरूपस्य कािचत्कत्या दूरस्थविषयसम्बन्धभावात् स्वरूपेण विषयात्र प्रकाशयित, किन्तु विषयसम्बन्धिन्या स्वपरिकरभूतया प्रभया, एवं ज्ञाताप्यतिसूक्ष्मस्वरूपतया क्वाचित्कस्स्वधर्मभूतज्ञानद्वारा दूरस्थानिप विषयान् प्रकाशयित ।

एवं दीपस्थानीयस्थात्मनः प्रभास्थानीयं ज्ञानविशेषं नित्यधर्मत्वेन प्रतिपाद-यन्ति श्रुतयः 'न विज्ञातुः ' इत्यादिना । 'स चानन्त्याय करूपते ' इति च धर्म- भूतज्ञानद्वारैव । 'अनृतेन हि प्रत्यूदाः ' अनादिमायया सुप्तः ' इत्यादिभिर्जाव-प्रकाशितरोधानेऽभिहिते स्वप्रकाशस्य जीवस्य स्वरूपितरोधानानुपपत्त्या धर्मभूत-ज्ञानितरोधानमेवेह प्रतिपाद्यत इत्यवसेयम् । 'सर्वे ह पश्यः पश्यित ' 'स्वेन रूपेणा भिनिष्पद्यते ' इत्यादिभिश्च बद्धदशायां तिरोहितज्ञानस्य जीवस्य मुक्तिदशायां तिरोधानिवृत्त्या स्वाभाविकरूपेणावस्थानं सर्ववस्तुसाक्षात्कारादि चाभिधीयते । अस्य धर्मभूतज्ञानस्य तिरोधानतित्रवृत्ती सङ्कोचिकासावेव । अहेः कुण्डलभावऋ-जुभाववदस्यापि सङ्कोचिकासावुपपद्येते । स्मृतिरिप ।

> 'यथा न कियते ज्योत्स्ना मरुप्रक्षाळनान्मणेः। दोषप्रहाणान्न ज्ञानमात्मनः कियते तथा।। यथोदपानकरणात्कियते न जरुाम्बरं।

सदेव नीयते व्यक्तिमसतस्सम्भवः कुतः ॥

तथा हेयगुणध्वंसादवनोधादयो गुणाः । प्रकाश्यन्ते न जन्यन्ते नित्या एवात्मनो हि ते '।। इति ।

'पुंस्त्वादिमन्त्वस्य सतोऽभिव्यक्तियोगात्' इति ज्ञानस्य सुषुप्त्यादिदशाया-मिष विद्यमानस्य जागर्यादिष्वभिव्यक्तिरेव, न तूर्षितिरिति स्वरूषानुबन्धिधमस्वमस्य सूत्रकारेणापि प्रत्यपादि । अतश्च— किमिदं धर्मभूतज्ञानं सावयवं ! उत निरवयवं । आद्ये विभुत्वहानिः । द्वितीये सङ्कोचिवकासानुषपितः ; निरवयवस्य तदसम्भवा-दित्यादीनामाक्षेपाणामनवकाशः । 'न विज्ञातुः' इत्यादिभिज्ञीतुरविनाशित्वादेव तर्द्धज्ञानस्याप्यविनाशित्वं वदन्ति श्रुतयः । श्रुत्येकसमिषगम्येऽर्थे यथाश्रुत्येव प्रतिपत्तव्यत्वात् । 'न हि वचनविरोधे न्यायः प्रवर्तते ।

सङ्कोचिवकासस्त्रपावस्थाभेदमादाय ज्ञानमुत्पन्नं नष्टमित्यादिप्रतीतिव्यवहारौ । यावत्करणसम्बन्धं ज्ञानस्य प्रकाशः । तनिवृत्तौ च तन्निवृत्तिः । यथा प्रकाश्यानां चिरकालस्थायित्वेऽप्यालोकायपेक्षः प्रकाशः कादाचित्कः, न तावता तेषां प्रकाश-कालमात्रस्थायित्वं ; एवं प्रकाशस्यापि नित्यस्य करणसम्प्रयोगनिबन्धनौ सङ्कोच-विकासौ , न च तावता तस्यानित्यत्वम् । तथा चाहुः—

> 'यथा न क्रियते ज्योत्ह्नेत्यादिवाक्यानुसारतः । ज्ञानं नित्यमवस्थाभिरुत्पत्त्यादिस्तु कथ्यते '॥ इति ।

सदातनस्याप्यस्य हतेः पादादुदकस्येवेन्द्रियद्वारैव प्रसरणम् । तथा प्रसरणमेदनिबन्धनश्च चाञ्चष्रवादिविभागः प्रत्यक्षत्वानुमितित्वादिविभागश्च ।

धर्मधर्मिणोरुभयोज्ञीनत्वाविशेषे को भेदस्तयोरिति चेत्—धर्मिभृतज्ञानं स्वस्वापृथिवसद्ध विशेषणभूतप्रत्यक्त्वानुकूल्द्वैकत्वमात्रविषयकम् । अस्य कदापि न सङ्कोचः। सदा स्वस्मै स्वयंप्रकाशम् । धर्मभूतज्ञानं बद्धदशायां कर्मानुगुण्येन सङ्कोचविकासशालि, तत्रापि सुपुप्तिदशायां सर्वथा विषयसम्बन्धाभावादत्यन्तसङ्कोचशालि। विषयप्रकाशनवेळायां स्वाश्रयाय स्वयम्प्रकाशम् ; स्वेतरविषयप्रकाशकञ्च।

धर्मधर्मिणोरुभयोरपि विषयपकाशकत्वरूपं ज्ञानत्वं स्वविषयकत्तानान्तरा-पेक्षामन्तरा प्रकाशमानत्वरूपं स्वयम्प्रकाशत्वञ्च ।

धर्मधर्मिणोरुभयोस्स्वयम्प्रकाशत्वेऽिष ज्ञानान्तरवेद्यत्वमप्यक्षतम् । धर्मिण-स्स्वयम्प्रकाशत्वं प्रत्यक्त्वैकत्वानुकूलत्वमात्रविशिष्टविषयकतयाः; धर्मस्य तत्त्वं ज्ञानत्वसुखत्वादिकतिपयधर्ममात्रविशिष्टविषयकतयाः। उभयोज्ञीनान्तरवेद्यत्वं नित्य-त्वादिविशिष्टविषयकतयाः।

धर्मिणस्स्वस्वापृथितिसद्धधर्ममात्रप्रकाशकत्वाद्धमे मृतज्ञानद्वयानभ्युपगमा कथं धर्मभूतज्ञानस्य ज्ञानान्तरवेद्यत्विमिति चेत्—धर्मभूतज्ञानस्य प्रसरणरूपावस्था- भेदनिबन्धनो भेदव्यवहारः । व्यविद्वयते च प्रकृत्यवस्थद्रव्यान्महदवस्थस्य द्रव्यस्य भेदः ।

घटादीनां पराक्त्वं ; तच्च स्वन्यतिरिक्तमात्रजन्यन्यवहारानुगुण्यवत्त्वम् ? तदिदं सर्वमभिषेत्योक्तमाचार्यः—

' ज्ञातुर्ज्ञितेरलोपं कथयित निगमस्मार्यते चैवमेषा तस्मादेकत्वसिद्धौ प्रसरणभिदया तद्भिदैकत्र पुंसि । योग्यादृष्टेरबाधान्न च भवति सुषुप्त्याद्यवस्थासु बाध-स्तत्तद्वस्तुप्रकाशक्षणविरहवती न प्रकाशेत बुद्धिः '॥ इति ।

दुनिया के कार्यरंग में स्त्रीयों का पात्र

BY

Mrs. PADMASANI ARAVAMUTHACHARI Rashtra Bhasha Visarad

मनुष्य एक विषय के मूल-तत्वको ढूँढ निकालना चाहें तो, वह कितना ही सच्चे अभिप्रायवाला ही क्यों न हो कभी कभी विघातक विचारों के वश हो कर गलत सिद्धान्तों में आजाता है । मानवसुधारणके युगारम्भ से आज तक अनेक महापुरुष अपने अपने मनके अभिप्राय भिन्न भिन्न तरह से विचार करके अनेकों विषयों के मूलतत्व को ढूँढ निकालने की कोशिश किये हैं । मानव कुटुम्ब के सुखशान्ति के रहस्य को खोलने के लिये अपने जीवन ही को अर्पण किये हुए अनेकों महर्षियों का जन्म हमारे भारत में हुआ है । इन महर्षियों के उच्च अभिप्रायों पर कोई अनुमान नहीं कर सकते । क्यों कि उनका चित्त स्वार्थरहित है । वैय्यक्तिक, आक्तिमक कारणों से कलुषित नहीं है । इनके आचार विचार विश्वसनीय है । फिरभी इन महर्षियों का विचार संपूर्ण निर्दोष है यह कहा नहीं जाता ।

मनुस्मृति में एक तरफ यों लिखा गया है कि स्त्रीयां चंचला होती हैं। सुरूप, कुरूप, अच्छा, बुरा का ज्ञान उन्हें नहीं होता । इसी सिद्धान्त को आमोदित करते हुए बहुतों का मत यही है कि स्त्रीयां पुरुषके वास्ते बनाई हुई एक चीज हैं। उसे गृह कार्य, वंशाभिषृद्धि तथा सेवा इसके अलावा कोई स्वतन्त्रता नहीं देनी चाहिये। शास्त्र सिद्धान्तरीति से स्त्रीयों का कार्यभाग निश्चय

किया जाय तो उन्हें अस्वातन्त्रय की बेडी ही ठीक समझी जायगी। "न स्त्री स्वातन्त्रचमहिति" का सिद्धान्त ऊपर कहे बात का उपसिद्धान्त (Corollary) ही है। ऐसे सिद्धान्तों को रखकर दुनियामें स्त्रीयों के कार्य-भाग के विषय में सोचना मेरी मतमें अनुचित जान पड़ती है। किसी सिद्धान्तों के आधार के बिना अपने स्वतन्त्र विचार से ही स्त्रीयों के कार्य-भाग के विषय में विचार करना ही इस लेख का उद्देश्य है।

युगधर्म के नामसे बहुत से विचारशील पुरुष गलत मार्ग को पकड़ ने हैं। पुराने आदिमयों को ऋषिवाक्य प्रधान हो तो आजकल के व्यक्तियों को काल-धर्म का अम (obsession of the time spirit)। स्वतन्त्र विचार करते समय पुराने सिद्धान्तों से भी बढ़कर यह कालानुसरण का अम ही ज्यादा तकलीफ देती है। इस धर्म का मत है कि सब तरह के कार्य-क्षेत्रों में स्त्रीयों को पुरुषों की तरह भाग लेने का अधिकार होना चाहिये। वे समझते है कि इसी तरह से ही स्त्री पुरुषों में समता है। यह तो समता की विपर्यास ही है। क्यों कि पुरुषों की मांती इन में शरीर सामर्थ्य व इढ़ता नहीं है। पुरुषों के गुण और इनके गुण में तथा शरीर के अंगों में भी बहुत फरक है। पुरुषों का अनुकरण सब तरह से करना एक तरह से पागलपन ही है। इसमें स्त्रीयोंकी स्वाभिमान शून्यता तथा परमत्ययनेय बुद्धि ही स्पष्ट दीखता है। यह तो उनकी प्रगती का लक्षण नहीं। इस पागलपन को दूर करके विचारशील आदिमयों को चाहिये अपने विचार और बुद्धिको बढ़ाकर उचितानुचित की विमर्शा करना।

रिवाज़ (रूढी) का दास्य पुराणमताभिमानियों तथा पर्याय से आधुनिक युशिक्षितों में भी दील पडता है। स्त्रीयां घरके कामकाजों को ही योग्य हैं उन्हें शिक्षा देने पर भी गृह शिक्षा अवश्य देनी चाहिये आदि विषय इस रिवाज में मिली हुई है। आजकल के समतावाद में तो स्त्री पुरुषों में एक ही तरह की

शिक्षा और एक ही तरह के कामधन्त्रे में दोनों भाग लेना यह सब प्रचार हो रहा है। लेकिन खूब सोचने पर भी यह विषय अनुचित ही जान पडता है। क्यों कि सब तरहसे पुरुष और स्त्रीयों में भेदभाव होने के कारण उनका कार्यक्षेत्र तथा शिक्षा भिन्न २ ही होना चाहिये।

हर एक काम करने को मनुष्यकी बुद्धि ही सबसे बढ़ कर मुख्य साधन है। तर्कशास्त्र बुद्धि का काम निर्देश चलने के लिये बना हुआ है। बुद्धि से, स्त्रीयों को यों रहना चाहिये, यों नहीं रहना चाहिये यह निर्णय करने के बदले, यों करना महिलाओं के उन्नती का उचपथ है कि, स्त्रीयों की रचना निसर्गदे-वताने किस तरह किया है, व उसे कौन कौन सी शक्तियां दी हैं, उसके शरीर धर्म को किस प्रकार बनाई है, उसके जीव और मनोधर्म की रचना किस प्रकार की गयी है, इन विषयों के बारे में खुब विचार करके इस नैसर्गिक रचना तथा धर्म को भलाबुरा कहकर दोष नहीं देकर उनका पूर्ण रूपसे मिलाना ही है। स्त्री धर्म को जानना ही मुख्य निशान है। इस विषय में हमारा ज्ञान और विचार कभी कभी गलत भी हो सकती है। लेकिन वह गैर समझी हमेशा स्थिर नहीं रहेगा । बुद्धि-तर्क निसर्ग-नियम के अन्दर ही रहना चाहिये । निसर्ग नियमों को जानने के लिये किसी बौद्धिक सिद्धान्तों की जरूरत नहीं। इसोलिये इसको स्वतन्त्र विचार कहते है। आज ढूँढ निकाले हुए एक विषय कल गलत समझी जाय तो उसे छोड देने तक को मनुष्य स्वतन्त्र है। स्त्रीयों के कार्य भागको निसर्ग नियम और रचना ही मुख्यांश है।

निसर्ग निर्मित स्त्री रचना से, स्त्रीर्या के कार्य भागों को दिखानेवाला धर्म या रुक्षण यों है।

सारे जीववर्ग के इतिहास को देखें तो एक बात समझमें आती है। कँचे दर्जेके जीवराशी में और बनस्पतीयों में स्त्रीख-पुरुषत्व भिन्न मिन्न होते हैं। वे बदल नहीं सकते (non-interchangeable) स्त्रीस्व से पुरुषस्व कम अथवा ज्यादा नहीं कहा जा सकता इस लिंग विभिन्नता से स्त्रीयों पर मातृस्व की एक विशेष हक है, यह निश्चय होता है। इससे उनके दर्जेका प्रश्न नहीं खुलता। पुरुष के ऊपर सिर्फ पितृस्व के एक हक के अलावा और कुछ नहीं जान पडता। इस मातृस्व का विकसित स्वरूप और कार्य याने शिक्षण, संगोपन, वैद्यक, परिचर्या (nursing) बालकों के अध्यात्मिकज्ञान (child psychology) परिचय आदी।

इसी तरह से स्त्री पुरुषों में भिन्न भिन्न दिखाये जाने वाला जीवशक्तिका गुण विभाग क्रमशः यों है:---

(अ) प्रेम,—कठोरन्याय प्रोती, (अ) सहजबुद्धि (intuition) तर्कबुद्धी, (reason) (इ) कोमलता—इढ़ता व सामर्थ्य, (ई) भावनाप्रधानता—संयम आदी।

िंग विभाग जैसा स्थिर और कभी न बदलनेवाला हुआ है, वैसा यह गुणद्वय में नहीं हुआ है। उतना ही नहीं यों विभक्त है इसे कोई मानते तक नहीं। मैं भी इसे पूर्ण विश्वास से नहीं कह सकती। इतना कहना अनुचित नहीं होगा कि एक दूसरे से (स्त्री-पुरुष) छोटा या बड़ा कभी नहीं हो सकता। पुरुष और स्त्रीयों का गुण भिन्न भिन्न होने पर भी दोनों आपस में पूरक, तथा पोषक हैं। तिसपर ये गुण द्वय एक ही व्यक्ति में पूर्णावस्था को पहुंचना संभव नहीं है। इन गुण द्वय के परस्पर मिलनसे माने, कठोर और मृदुत्व के परस्पर स्पर्श से जीवन विकास तथा शान्ती मिल्ती है। सब स्त्रीयों का गुण एक ही तरह से यों ही होता है यह कहना मुक्तिल है। लेकिन कुछ उद्धेक्य से स्त्री-पुरुषों का गुण विभाग यों किया जा सकता है।

स्त्री.

पुरुष.

१ प्रेम,

कठोर न्याय प्रेम,

२ सहज बुद्धी, (intuition),

तर्कबृद्धी (reason),

३ कोमलता व सहनशीलता,

द्दद्ता व सामर्थ्य,

४ भावना प्रधानता,

संयम,

प नियत कालमें कामेच्छा, (periodicity of sex-desire)

कामेच्छाकी पुनः पुनरावर्तन, (frequency of sex-desire)

६ वंशरक्षण प्रवृत्ती.

आत्मरक्षण प्रवृत्तो.

(Propensity for propagation and protection of species).

(Propensity for self-preservation).

3

इस लेख में पुरुषत्व के गुण वैशिष्ट्य के विचार को छोडकर स्त्रीयों की शक्ति और गुण के अनुसार उनका कर्तव्य कौनसा है यह निर्णय करना चाहिये। आजतक और आज करू भी स्त्रीयां अपने आर्थिक परावरुम्बन के कारण केवल पुरुषों के इच्छानुसार चली हैं। स्वतन्त्रता रहने परभी अपने नैसर्गिक पूर्णावस्था के उन्नत पथ को छोडकर पुरुष के अन्धानुकरण से सब कार्य करी हैं। जितराष्ट्र जैसा विजयी राष्ट्रों का अनुकरण करता है, वैसे ही स्त्रियां भी करती हैं। स्वतन्त्रता मिल्लने परभी अनुकरण वृत्ति नहीं छुटती। इस अनुकरण वृत्ती को छोड कर, आत्म-ज्ञान से स्त्रीयां अपने अपने कार्यभाग को स्वतन्त्रता से पूर्ण करना चाहिये। यों स्वतन्त्रताके मार्ग पर जाने को कई आधुनिक विचार तथा सामाजिक व्यवस्थायें अनुकूल हैं। समतावाद और बढ़कर उसके तत्वों के अनुसार आर्थिक व राजकीय फेर नहीं होने से स्त्रीयों की परतन्त्रता दूर नहीं हो सकती। स्त्रीयों को स्वसंरक्षणमार्ग में भो कई नैसर्गिक

किमियों से रुकावट होती है । इसिलये स्त्रीपुरुष में समतावाद माने स्त्रीयों का समत्व व कार्य भाग किस प्रकार का होना चाहिये इसे निर्णय कर, उसी तरह के समत्व व स्वतन्त्रता को बढाने का प्रयत्न सब स्त्रीयों को करना चाहिये।

8

स्त्रीयों के जीवन में उपयुक्त कालके कर्तव्यों को यो दिखाया जा सकता है।

ब्रह्मचर्यावस्था,—इस अवस्था में स्त्रीयों को सब तरह के नैसर्गिक गुणों की अभिवृद्धि ठीक होनी चाहिये। यह अवस्था प्रकृतिमान के अनुसार बाल्यसे १३—२० सालतक रहेगा। नैसर्गिक गुणों की अभिवृद्धी करते समय ऐहिक लाभनष्ट तथा पुरुषों के अनुकरणवृत्ती नहीं रहना चाहिये। स्त्रीयों की अभिवृद्धी, विशेषकर उनकी शारीरिक अभिवृद्धि बहुत शीघ्र हुआ करता है। इसलिये स्त्रीयों का शिक्षणकम पुरुषों से भिन्न रहना चाहिये।

मातृत्व, — यह जीवन २० — ५० साल तक रहता है। इसी अवस्था में स्नीत्व का पूर्ण विकास होता है तथा इसी अवस्था में स्नी दुनिया के आदर्श पूर्ण कार्य में भाग ले सकती है। याने भावी जनांगकी मां वह होने के कारण अपने पुत्रको सद्भुणी तथा आदर्श पुरुष बनाने की पूर्ण शक्ति उस में ही है। मातृत्व में ही सृष्टि देवी ने अपना पूर्ण परिश्रम संचित किया है सृष्टिका सौंदर्य वहीं है। इस एक स्थान में स्त्री-पुरुषों से कुछ ऊँचे दर्जे की कही जा सकती है। क्यों कि मातृत्व में जा कोमलता व सहिष्णुता होती है, वह पुरुष जीवन में कभी नहीं हो सकता। स्त्रीयों के इन सहजगुणों से वे दुनिया के कार्यरंग में ऐसे एक पात्र हैं कि जिनके बिना पुरुष अकेले शान्ती और सुख नहीं प्राप्त कर सकते। समता याने पुरुष और स्त्रीयों में सम्मिलित शिक्षा, और हर एक

काम धन्धे में दोनों का भाग, यही समता नहीं । गृहकार्य, शिक्षा, दुनिया के कार्यों में अपने निसर्ग-निर्मित रचना के सुबिधानुसार, उचितरीतीसे, भाग लेकर मातृत्व की ऊँचे पद से दुनिया भर में कैली हुई अशान्ती को दूर कर संसार में अखण्ड शान्ती का स्थापन करना ही स्त्रीयों का मुख्य कार्य भाग है । मनुष्यकी कठोरता से दुनिया को बडी हानी होती है । आज के महायुद्धसे यह बात स्पष्ट होगी । 'यह बात अनुमान किया जा सकता है कि हिट्लर जैसे कठोर तथा निदेय पुरुष को यदि विवाहित होकर सपत्नीक कुटुम्ब के आनन्द व स्त्री के प्रेम तथा कोमलता के प्राप्त करने का अवसर मिला होता तो उसका इतना पाषाण हृदय और कठोरता न होती होगी । यह घोर हत्यायें, दुनिया में यह अखण्ड अशान्ती, दीन अनाथों की यह हाहाकार, न मचता । हर एक स्त्री का कर्तव्य है कि दुनिया में शान्तिस्थापन करने के लिये अपने सन्तानों को भी शिक्षा देकर और स्वयं भी कार्य करना चाहिये ।

अनेक विद्वान् और महा पण्डितों के सुंदर व आदर्शपूर्ण लेखों के बीच में मेरी इस छोटी कृति को प्रकट करने की बड़ी कृपा किये हुए युनिवर्सिटी के अधिकारी वर्गको मेरी हार्दिक व कृतज्ञता पूर्ण वन्दनाएं है। मेरे लिये यह बड़ी गर्व तथा हर्ष की बात है कि मान्य राजा. सर. अण्णामले चेट्टियार, आपके इस "षष्ट्यव्धपूर्ती" के महा समारम्भ के चिह्नस्त्य इस प्रती में मेरी इस लेख को प्रकट करने की सुअवसर मिली। ईश्वर से मेरी प्रार्थना है कि, सद्भुण पूर्ण, नीती और धर्म निरत, मान्य, राजा. सर. अण्णामले चेट्टियार, आपको और आप के कुटुम्व को ईश्वर दीर्घायु रखें तथा आपकी कीर्ती अचल रहने के लिये आपका विश्वविद्यालय दिनों-दिन अभिवृद्धी पार्वे।

VERSES IN KANNADA IN HONOUR OF THE FOUNDER

ಕಂದ || ವುನ್ನಣೆಗೆ ಪಾತ್ರವಾಗಿ

ಪ್ರಣ್ಣಾ ಮಲೆ ಜಿಟ್ಟಿ ವಿಶ್ವ ವಿದ್ಯಾನಿಲಯಂ .

ಉನ್ನತಪದವೀಧರರಂ

ಸನ್ನುತಮಾಗರ್ಪಿಸುತ್ತೆ ಮೆರೆಯಲಿ ಸತತಂ ||

ಕಂದ || ಬಡವರ ವಿದ್ಯಾಭ್ಯಾಸಕೆ
ಸಡಗರದಿಂ ಧನಸಹಾಯವುಂ ಗೈಯ್ಯುತೆ ತಾಂ |
ವೊಡವಿಯೊಳಶೇಷಕಲಿಗಳ
ಕಡಲಿಗೆ ಶ್ರೀ ಚಿಟ್ಟಿಯವರು ಚಂದಿರನಪ್ಪರ್ ||

ಇಂದ್ರವಜ್ರಾ || ಶ್ರೀಜಾನಿನಿಸ್ಸೀಮ ಕೃಪಾಕಟಾಕ್ಷ ಸಂಜಾತಸರ್ವಾಧಿಕಭಾಗ್ಯಯುಕ್ತರ್ | ರಾಜದ್ಯಶೋರಾಶಿಯುತರ್ ಜಯಿಕ್ಕೆ ರಾಜಾ ಸರ್ ಅಣ್ಣಾ ಮಲೆ ಚೆಟ್ಟಿಯಾರ್ಗಳ್ ||

ಕಂದ || ಧರೆಯೊಳ್ ಜ್ಞಾನದ ಬೆಳಕಿಂ

ತರುಣಜನರ್ ಬಾಳಿನ ಬಗೆಯರಿಯುತ್ತೀಗಳ್ |

ಚಿರಮುಂ ನಾಡಿಗೆ ಯಶವುಂ

ದೊರಕಿಸಿ ಬಾಳುಗೆ ಸರಸ್ವತಿಯ ದಯೆಯಿಂದಂ ||

ಶಾ|| ವಿಕ್ರೀ|| ಸಂಗೀತಾದಿಕಲಾಪ್ರಚಾರ ವಿಷಯಕ್ಕು ದ್ದಾ ಮಯತ್ನಾನ್ವಿತರ್ ಗಂಗಾಧಾರಿಪದಾರವಿಂದಯುಗದೊಳ್ ಭೃಂಗಾಯಮಾಣಾಂತರರ್ ತುಂಗೋತ್ತುಂಗ ವಿಪತ್ಕ ರೀಂದ್ರರಿಗಿವರ್ ಶಾರ್ದೂಲವಿಕ್ರೀಡಿತರ್ ಮಾಂಗಲ್ಯಂ ಸುಖಸಂಪದಂ ಪಡೆದು ತಾಂ ಜೀವಿಕ್ಕೆ ಕಾಲಂ ಚಿರಂ ||

ಶ್ರೀ ಅಣ್ಣಾ ಮಲೆಶೆಟ್ಟಿಯವರ ಷಷ್ಟ್ಯಬ್ದ ಪೂರ್ತಿಯ ಶುಭಾಶಂಸನೆಯ ಪದ್ಯಗಳು.

ತಿಂಕನಾಡಿನ ಕುಶಲಕಲಿಗಳ ಕಣ್-ಬಲಿ! ಜೋಳಶಿಲ್ಪದ ಹಿರಿಯ ಗೋಪುರ ಮೆರೆವೆಡೆ! ಶ್ರೀ ಜಿದಂಬರಲಿಂಗ ಬೆಳಗುವ ನಲ್-ಮನೆ! ಭಕ್ತನಂದನರೊಲಿದು ನಿಂದಿಹ ಕಲ್-ಮನೆ!

> ಇದುವೆ ನೋಡಣ್ಣಾ ಮಲೆ! ಹದುಳವಾಗಿದೆ ಕಣ್ಣಿ ಗೆ.

ಇಲ್ಲಿ ಹೊಳಿವುದು ಚಿಲುವ ಸರಸತಿಯೊಳ್ ಮನೆ; ಎಲ್ಲ ಕಲಿಗಳ ನಲ್ಲಪಣ್ಗಳ ಸವಿಗೊನೆ; ತಮಿಳ ನುಣ್ಚರದಿಂಪ ಚಿಲ್ಲುವ ಬಿಂದಿಗೆ; ಮಿರಿಯುವಣ್ಣಾ ಮಲಿಯ ಕಲಿತದ ಜಾಣ್ಮನೆ; \circ

೨

ಅದುವೆ ಶೆಟ್ಟರ ಹೆಸರನು ಮುದದಿ ಸಾರುವ ಭೇರಿಯು.

ತಮಿಳು ಸೋದರರೊಲಿವ ನಾಡಿನ ಭಾಗ್ಯವೋ! ತಮಿಳುಸಂಸ್ಕೃತಿ ನೆನೆದು ತಾಳಿದ ರೂಪವೋ! ಗಾನದೇವತೆ ಬಯಸಿ ನಿಂದಿಹ ತಾಣವೋ! ಮಾನ್ಯಶೆಟ್ಟರ ಕೀರ್ತಿತರುವಿನ ಬಳವಿಯೋ! ನೋಡು ನೋಡಣ್ಣಾ ಮಲೆ,

ನೋಡು ನೋಡಣ್ಣಾ ಮಲ್ಕೆ ಕುಶಲವಿದ್ಯೆಯ ಸಿರಿನೆಲೆ. ಸ್ಥಾ ನೆಪತಿಯೆನಿಸಿದ್ದು ವಿದ್ಯಾ ನಿಲಯಕೆ ಶೀನಿವಾಸಾಖ್ಯಗುರು, ಹರಸಿದನೆಂದರೆ— ಮಾನವರ ಮಾನೃತಿಗೆ ಪಕ್ಕಾ ಗದಿಹುದೇ? ಈ ನಿಖಿಲ ವಿದ್ಯಾಲಯಂ ಬೆಳಗದಿಹುದೇ?

> ತಮಿಳು. ನಾಡಿನ ಕನ್ನಡಿ ತಮಿಳರೆಸಕದ ಮುನ್ನು ಡಿ

ಮಕ್ಕ ದಾನಕೆ ನಾಶವೆಂಬುದು ನಿಖರವು; ಶಾಸ್ತ್ರದಾನಕೆ ನಾಶವೆಂಬುದೆ ಬಾರದು. ಸುವುತಿಶೆಟ್ಟರು ತಮ್ಮ ಧನವನು ಕೊಟ್ಟರು; ಎಣಿಸಿ ಗುಣಗಳ ಧನವನೆಣಿಸದೆ ಕೊಟ್ಟರು.

> ಈ ಪರಿಯ ಕೊಡುಗೆಯನು ಹೊಗಳು ; ಅಂಜದಲಿ ಹೊಗಳು ಕವಿಯೆ.

ಬಡವರಾಗಹ ತರುಣರೆನಿಬರೊ ಬಳಿದರು; ಪಡೆದ ವಿದ್ಯದಿ ಘನತೆಗೇರ್ದರು'— ಬಾಳ್ವರು. ಬಡವರಾಸರೆಯಿನಿಪ ವಿದ್ಯೆಯ ಮನೆಯಿದು ಮೃಡನ ಕರುಣೆಯ ಪಡೆದು ಗೆಲ್ಲಲಿ ನಿತ್ಯವು.

> ಇದನು ಜನರಿಗೆ ಸಲ್ಲಿಸಿ ಸೇವೆಗೈದರು ಸೆಟ್ಟರು

ಅವರದಾನಕೆ ತಲಿಯ ತೂಗಿತು ದೇಶವು; ಅವರ ಪೂರ್ವಜರಿಲ್ಲ ಕುಣಿದರು ಸಗ್ಗದ; ಅವರ ಪೀಳಿಗೆ ಹೆಮ್ಮೆಗೊಂಡಿತು — ದಾನಕೆ; ನಿರಿಯನಾಡಿನ ಜನರು ಕವಿತೆಯ ಬರಿದರು.

> ಕೊಡುವ ಪರಿ, ಇಂತಲ್ಲವೇ – ಪೊಡವಿ ಸಮವೇ ವಿದ್ಯಕೆ ?

Ų

25

ځ

ಹಾಡು ಹರಿಯಲಿ ಹೊನಲುಹೊನಲಲಿ ದೇಶದಿ; ಕೋಡಿವರಿಯಲಿ ಜನರ ಮೆಚ್ಚಿನ ನುಡಿಗಳು; ಹೊಗಳಲಣ್ಣಾ ಮಲಿಯ ಶೆಟ್ಟರ ಮತಿಯದು; ಮಿಗುವ ಬೆಳ್ಟಸವವರದಾಗಲಿ ನಿತ್ಯವು.

> ಕಾಲವೆಷ್ಟಕು ಮಸುಳದೆ ಕಾಂತಿಯೇರಲಿ ಕೀರ್ತಿಗೆ.

೮

ಬಾಳ ಬೆಳಸಲ್ಗಿ ಹೆಸರ ಹರಡಲಿ ದೇವರು; ಹಿತದೊಳಣ್ಣಾ ಮಲೆಯ ಶೆಟ್ಟರ ಪೊರೆಯಲಿ. ಹಸ್ಟಿ ಪೂರ್ತಿಯ ದಿನವು ಸುಖಮಯವಾಗಲಿ; ಅವರ ಶಾಂತಿಗೆ ಕುಂದುಬರದಿರಲೆಂದಿಗು.

> ಅವರ ನಡೆಯಾ ಗೆರೆಯನು ಹಿಡಿದು ಲೋಕವು ನಡೆಯಲಿ.

ج

ಎ. ಕೆ. ಪುಟ್ಟರಾಮು.

ಧನ್ಯೆ ದಲ್ ಲಕ್ಷ್ಮಿ

ಸರಸತಿಯ ಬೀಣೆಗೊದಗಿಸೆ ತಂತಿಯಂ, ಧನ್ಯೆ ದಲ್ ಲಕ್ಷ್ಮಿ. ಲೌಹನಿನದಮೆ ವೈಣರವಮಾಗಿ ಪೊರೆವುದು ಚಿರಂತನದ ಸುರಗಾನದಿಂ, ತ್ಯಾಗಿ, ನಿನ್ನ ಜಸಮಂ, ವಿಸ್ಮೃತಿಯ ಮೃತ್ಯುವಿಂ. ಮುನ್ನೆ, ವಿಕ್ರಮಾರ್ಜುನ ವಿಜಯಮಂ ಬರೆದು, ಪಂಪಕವಿ ಕೊರೆದನರಿಕೇಸರಿಯ ಪೆಸರಂ ಚಿರಂಬಾಳ್ವ ಕೃತಿ ಶಿಲಾ ಶಾಸನದಿ. ಕಾವ್ಯವೋದುವ ಕೇಳ್ವ ಕನ್ನಡಿಗರೆಲ್ಲರ ಕೃತಜ್ಞತೆಗೆ, ಚಂದ್ರ ರವಿ ಪೊಳೆವನ್ನೆಗಂ, ಪಾತ್ರನಾಗಿರ್ಪನಾ ನೃಪತಿ, ತನ್ನು ಳಿದ ಕಜ್ಜ ಗಳ್ ತನ್ನ ರಾಜ್ಯಂಗೂಡಿ ಪೇಳೆ ಪೆಸರಿಲ್ಲದಾಗಿರ್ಪೊಡಂ. ದವ್ಯ ಕೃತಿ, ಹೇ ಧನಿಯೆ, ನಿನ್ನ ದಾನವನಮೃತಮಂ ಮಾಡಿ, ನಿನ್ನಾ ತ್ಮಕಮೃತ ತೃಪ್ತಿಯನೀವುದಾವಗಮ್: ನಿನಗಕ್ಕೆ ಆ ಸ್ಪೆಪಿನಾ ಶಾಂತಿಯಾ ಸೊಗಮ್.

ಕೆ. ವಿ. ಪುಟ್ಟಪ್ಪ

[್] ಆಣ್ಣಾ ಮಲೆ ವಿಶ್ವವಿದ್ಯಾ ನಿಲಯದ ದಾತೃವಿನ ಸಾಸ್ಟಿ ಪೂರ್ತಿಗಾಗಿ ಹೊರಡಲಿರುವ ಸ್ಮಾರಕ ಗ್ರಂಥಕ್ಕೆ

ಮೆಟ್ಟುವ ನೆಲ ಕರ್ನಾಟಕ *

0

ಎಲ್ಲಾ ದರು ಇರು; ಎಂತಾದರು ಇರು; ಎಂದೆಂದಿಗು ನೀ ಕನ್ನಡವಾಗಿರು. ಕನ್ನಡ ಗೋವಿನ ಓ ಮುದ್ದಿನ ಕರು, ಕನ್ನಡತನವೊಂದಿರೆ ನೀನಮ್ಮಗೆ ಕಲ್ಪತರು!

్

ನೀ ಮೆಟ್ಟುವ ನೆಲ — ಅದೆ ಕರ್ನಾಟಕ; ನೀನೇರುವ ಮಲೆ — ಸಹ್ಯಾದ್ರಿ. ನೀ ಮುಟ್ಟುವ ಮರ — ಶ್ರೀ ಗಂಧದ ಮರ; ನೀ ಕುಡಿಯುವ ನೀರ್ — ಕಾವೇರಿ.

a

ಪಂಪನನೋದುವ ನಿನ್ನಾ ನಾಲಗೆ ಕನ್ನಡವೇ ಸತ್ಯ.
ಕುಮಾರವ್ಯಾಸನನಾಲಿಪ ಕಿವಿಯದು ಕನ್ನಡವೇ ನಿತ್ಯ.
ಹರಿಹರ ರಾಘವರಿಗೆ ಎರಗುವ ಮನ, ಹಾಳಾಗಿಹ ಹಂಪೆಗೆ ಕೊರಗುವ ಮನ, ಪೆಂಪಿನ ಬನವಾಸಿಗೆ ಕರಗುವ ಮನ; — ಬೆಳ್ಗೊಳ ಬೇಲೂರ್ಗಳ ನೆನೆಯುವ ಮನ,

ಜೋಗದ/ಜಲಪಾತದಿ ಧುಮುಕುವ ಮನ, ಮಲಿನಾಡಿಗೆ ಹೊಂಪುಳಿವೋಗುವ ಮನ; ಕಾಜಾಣಕೆ ಗಳಿ ಕೋಗಲಿಯಿಂಪಿಗೆ, ಮಲ್ಲಿಗೆ ಸಂಪಗೆ ಕೇದಗೆ ಸೊಂಪಿಗೆ, ಮಾವಿನ ಹೊಂಗೆಯ ತಳಿರಿನ ತಂಪಿಗೆ ರಸರೋಮಾಂಚನಗೊಳುವಾತನ ಮನ; ಎಲ್ಲಿದ್ದರೆ ಏನ್? ಎಂಪಿದ್ದರೆ ಏನ್?

ಕನ್ನಡನೇ ಸತ್ಯ ! ಕನ್ನಡವೇ ನಿತ್ಯ ! ಅನ್ಯವೆನಲದೆ ಮಿಥ್ಯಾ !

ಕೆ. ವಿ. ಪುಟ್ಟಪ್ಪ.

[್] ಅಣ್ಣಾ ನುಲೆ ವಿಶ್ವವಿದ್ಯಾ ನಿಲಯದ ದಾತೃವಿನ ಷಷ್ಟಿ ಪೂರ್ತಿಗಾಗಿ ಹೊರಡಲಿತುವ ಸ್ಮಾರಕ ಗ್ರಂಥಕ್ಕೆ.

SONG

By

Sir Umar Ali Shah, M.L.A., త్ర్రీరాజా సర్ అన్నామలయ్య ఛెటియార్ (ఛెటివా౯) షష్ట్యబ్ట్రోవువాభివర్ణన శ్లోకా:.

- శ్లో ॥ శ్రీరాజా సరన్నామలయ్య చెటియార్ సంస్తూయమాన్మవా దివ్యానంతదిగంతదానవిశదా విద్యాలయ స్థాపితా నానానేకకళాధురీణసుగుణాలంకార తేజోమయూ త్వచ్చప్రీ సముపాస్యతాం విజయతాం సర్వంసహాసంస్తుతా.
- శ్లో ఆ శ్రీరాజా సరన్నామలాయ చెట్టియార్ విఖ్యాతచాడిక శ్రీకల్యాణకళాకలాప విలసత్సెభాగ్యభాగ్యాదయా ధ్రుస్థాపితభ క్రలోకనసతీ దానార్ల బోదంచితా త్వచ్ఛమ్టీ సముపాస్యతాం విజమతాం సర్వంసహాసంస్తుతా.
- శ్లో ॥ జయతు జయతు రాజా సర్నామలాయ ఛెటియార్ కోటిర్దానాక్లనోదీర్లా విద్వాక్ విశ్వకళాలయా.
- శ్లో ॥ భారత పుత్ర ఛెటియార్ లమ్మీ ధా రేయస్తీనిధి షష్ట్యాత్సవవర్ధం తే జయతాం శతవత్స రే.
- శ్లో ॥ సారస్వతకళాలోక: లోక: సాకృతవిడ్రిసత నానాకోవిద సంతుష్ట్ర ఛెటియార్ దానవాహిసీమ్. 138

అణ్ణామలై విశ్వవిద్యాలయము, అణ్ణామలైనగరము. మ-రా-రా-(శ్రీ). ది. ఆనరబిల్ డాక్టర్. రాజాసర్. అణ్ణామలై ్శేస్ట్రీ గారి

షష్టి**పూ**ర్తి మహెళ్ళావమందు సమర్పించిన

పంచరత్నములు

విద్వా కి. అప్పన్న, B. O. L. జుపన చం[ద ేఖరరావు, B.A. (Hon) B.Ed.

1 రాజశిగోమణి (శ్రీ)నట రాజు నగర్తార్కులాబ్ధి రాం కేంకుని, వి భాజితు, నన్నమలై విభు తేజో విభవాయు రధికదీపు నొనగ్చుకా ॥

2
(శ్రీ) కమలామణీ విమల
చిన్నృనులార్ద్ర్తి వనస్థ దివ్యవి
ద్యా కమనీయు ఫుష్మమధు నా నేడు
భృంగ కుమారుండా
(శ్రీ) కమనీయమూ గ్రియగు కృష్ణుడు
" చస్టిఫూ గ్రి" యం

డీకరుణాలు, చెట్టివిభు కిచ్చు, శతాయువు, సౌఖ్యసంహదల్ ! అమలిన " షస్ట్రిప్పా_్తికి" ముఖాంబుజ వ్మిసుత మందహాసముల్

విమల విదగ్ధ **భావ మ**ధు పేశల బం**ధు**ర మాట**ా**గాం చ**్ర** గా

మ్యమను మాట నెంచని **త్వదా**ర్య [పవృత్తికి మెచ్చి వాసవా

ద్యమరులు, నిత్య సూత్న వయః పటిమంబు నొసంగి రేమొకో!

4

కలువ పిసాళి నిగ్గు తెలిగన్నుల మన్నవలంద ... సీక్మునె

వలఫుల జిక్కు - కొందళుకు బట్టలు దాలిచి, బాట్టువెట్టి, మా

తెలుఁగు సరస్వతీ సతీయె తెచ్చెను తీయని కమ్మతేనియల్

చిలుకు లతాంత సంతతుల చెల్మి (గహింపుము, చెట్టియాక్విభా !

5

వర గుణోజ్జ్వల వణిగ్వ శవారాశికి కల్పవృశ్లముణోతె గిలిగినావు, విశ్వవిఖ్యాతమా విద్యాలయమ్మును పేర్మిమిగాఱఁగ నీవు పెట్టినావు, సంగీత సాహిత్య సకల శాత్ర్రుబుల ధీమంతులగువారిల దెచ్చినావు, రాష్ట్రహిళియును — నాంధాంగ్లాభ్యుదయుడైన " తిక్రిరెడ్డినాయుని " రజేర్చినావు,

అధ్ధికుల కల్పవృక్ష ! దుగ్గాభ్ని కీర్తి! సరస సాహిత్య సంగీత చ్రకవర్తి! సౌమ్యగుణమూర్తి! నేడు నీమష్టిపూర్తి; అందుకొను పద్యమాలను నధిక బ్రీతి.

ఆశీస్స్తుమములు. 1

సిరులును విద్యలు౯ాజెలిమి సేయమహోన్నత్తవెభవంబుచే

వరలుమనీషికింబిసిని

వారలచేతికి, దానఖర్జువు౯

నెఱపినదాతకు౯ దమిళ

ేతకు నన్నమళాయసెట్టికి

టఱువదియేండ్రయుత్సవము లర్వదితోంబదికుట్నలించుకె౯

్రదావిడభూమినీకతన ధన్యతఁగాంచె, సనంతరత్నశో

భా**వృత**్షెపునభారత**మ**

హావిషయుబుతనించె, చెట్టినా

మ్భావర! నీకటాశుమునం బూచిన విశ్వక ళాలయంబుచేం

దావులుజి**మ్కుచు**న్న దిచి దంబర్యంబర చుంబిత్మ పథ౯

మతిమం**తుండ**గున్నగసోదరుఁసరా

మస్వామ్యభిజ్ఞాండుదా రత**నా**టించినసంస్థలెల్లసిగిమా

రంబాల్స్టినీవల్లఁబు

మ్పితమై, నీయకోలంక ధర్మతిరతి౯ వేనోళ్ల ఁజాటించుఁ(బో

న్నతకీ ర్త్ ! పది వేలవరములు కా న్రాల్ స్ట్రీకుస్తీవారికిక్

ప్రవహించెనొఁకకోటిపై చిల్కు-నీ కేలం గమనీయదానగంగాయురంబు పొదలె, సీ కెం జేతీసో మణంబునంజేసి కళలకునిండారుకండపుష్టి విద్రాంతీనందెనీవిఖ్యాతీసుందరి కన్యాకుమారి కాగ్రంబునంను భాసి లైసేవల్లుబశుపతీశునిపూజ నటరాజునకునగ్న నాట్యశాల పలుక నేటికినీయుప్పపులుసుతినని సంసగనరాదు భరతవర్గంబునంను

సంస్థాగనరాదు భరతవర్ష ంబునంకు ధన్యుడవునీవు[దావిడ దానవీర! అన్నమళ సెట్టి! నీకు బహ్మాయురస్తు

డిల్లీలోనలకాశికానగరిలో డేరాడును పాంతనుం దల్లాసింహళభూమిలోనంబరమా యందొప్పసీదాతృతా మాల్లులోజిమ్కుసువాసనాలహరివి శవ్వ్యా ప్రమెసీపయిక్ జల్లుక్ గావుతమస్టి పూర్తులనజ (సంబుక్ సహ్యసంబులక్

> జి. జా పు **వ .** ఆం₍ధపండితుఁడు, విమ**ొండ.**

॥ **శ్రీ రామ**చం(చాయ నమ**ః ١.**

యెరాజా. సర్. అన్నామలై చెట్టి ధర్మవశంస.

(త్రి కవిభూషణ-శతావధాని-దోమా. పేంకటస్వామి గుప్త గారు.)

్శ్రీ శివకామానాథో । నటరాణ్మెళి శ్చిదంబరావాసః । రాజా-సర్-అన్నామల । చెట్టి బుధేం[దాయ దిశతు శుభ మనిశమ్ ॥ 1 ॥

11 2 1

11 3 11

గీ॥ కనడుకదను వంశము కడు గణను గొంచుం। జెలుగి-యట స రన్నామలై చెట్టి మేటి। ఒక శితాబ్దముటింద నయ్యారుకులము చి। దంబరముండి పూశాస్త్ర స్థాయి సేయ

కేంద్రాజభవ్యపద సేవకు లై - యల దేవళాన న ! న్యూనవిభూత్యు క్రముగ నొప్పెడు గోపురముఖ్యముల్ కడుక్ ! మానితరీతీం ద్వీరి స మల్ తగ నర్థశతంబు మాన్ను - సాం ! పూనంగం దేర్ల త్రివిలెడ నొప్పంగం జేసిరి ధర్మస్త్రిముల్ గ్రీ స్ట్రా రామ్లు మండ్లో స్ట్రీ పృధ్యి పతికి ! నన్న యగు దివాక్ బహదురు సన్నదు గల ! రామసామిచెట్టి చిదంబరమును జేరి ! మునిసిపల్ - తాలుకా - సంఘములను నేరి ! బ్రజల కెంతయుననుకూలవ రైనం దానే ! అతని పున్నెమే ఆ యూర నలరు నీటి ! వసతియుం-దగు ైహాసూర్-లు పరంగుటయును ॥ 4 ॥

ఉం అన్నయు-నన్నకుం దొలిటి

యాధ్యులుఁ జన్న లసత్పథంబున్ ।
మన్నగు దార చరించుటకు మక్కిలి

నెమ్మదిం గోరినట్టి స !
జ్ఞన్నమ లె క్రభుంశు కడు

హర్యుమెయిం దన పేర వైనామీ !
బ్రోన్న ఆపీఠము న్నిలిపెంట బాల్పు చెలంగం చిదంబరస్థలికా ॥ ఏ ॥

[సగ్దర 🏽

(శ్రీమానాజీ మహేశీ (శితశుభదయశ శ్రీసమాఖ్యాహ్య విద్యా ! రామ్ శేణిక్ గళాశాల- ద్రమిశసువచో రాచితాగార్గెర్వ్ ! ణీమాద్య దేహముక్ మానితగురుజననియమా నిందితాభ్యాసధామం ! బీ మైం జెల్వారు విద్యాగృహములు గొని ధీ హృస్యం డన్నామలుండుక్

11 6 11

గీ॥ పరంగ నన్నాములైయూనివిస్సిటి యన ! జైదుమీమహాపీఠంబు పర్వ-దాని ! ఠాయి నన్నాములైనగర మనం గొల్పి ! (శ్రీచిడంబరడైవంబు కృపకుం బాత్ర ! నయవిధంబుగం గొల్పె నన్నామలుంపు

1171

ఉ॥ చేతికి నెమ్ము లేనియటుం జేసిన దానము లెన్ని యేనిము౯ । భాతి చెలం⊼డి౯ జనువు పద్ధతి గల్గినవారికి౯ గలా । భాతికి నాయమూయుగల వారికి-భారతభూమి నాంగ్లభూ ।

మీతలమందు సాయము న

181

సీ॥ మధురకాలేజిని-మధుర యమెరికను కాలేజి హోస్టలు గ్రాములులోని ! పరంగమైలాపూరం-దిరిచినాశలించి, యస్. నేమశల్ హైసూగాళ్ల బోమణకును ! డెబ్రాడూ పురిని నిండిను పబ్లికు స్మాటి డిల్లీ నిర్విను స్మూటిం దనరింప ! డిల్లీ నిర్విను స్మూటిం టీకు రాజిలం జేయు బ్రహ్ము చేశంబునక్ రంగునుపురి !

మేయముగాఁ దనరించె నీతుమ్

గీ॥ మాలుపొనఁ-గాన్బైయందును మొగిఁ గొలంబా। పురిని-మదరాసురామకృష్ణరుచిరమఠ। మునకు ధర్మము గావించెఁ బానర ననఘుఁ। డయిన రాజు సఱ్జన్నా మలయ్య సెట్టి

11 9 H

శాగ తేవారంబులు-వేదశాస్త్రములు-న ద్ధిక్ రాజిలం జేయఁ దా I నావేలుం డితఁ డేర్పరించి మటిగా నానూనవిద్యాఘన I మేపీణ్యంబు నెసంగఁ జేయుటక్మునె వేనమ్యపీఠంబునక్ I శ్రీవిన్యాసము నింపుగాం గొలిపెనీ చెట్టిపభూ త్రసుండుక్

110 11

గీ॥ సృష్టి చేసిన యజుడు సృజించిన జగ । మను భరించి పాలింప నన్భుతపుఁ గూర్డు । తఁ_‹ గలి వేంక జేశుఁ డనఁ ' బడ్డాంతుంఁ డొళ్ళు । రీతిగాఁ గూర్డు వేంక టరెడ్డినాయం ! డే మహాసంస్థను భరించి యేలు సొంపు । నిమ స రన్నామల కేష్ట్ కింపు హెచ్చు ॥ !! ॥

కు రహీ నన్నామల నగరిని ! మహిళాపుగి నీలగిరుల నుహిళాసభల౯ ! మహిమెచ్చంగ: జికిత్సా ! గృహాము శిశువులకును చెట్టి పృధ్విం గొల్పె౯ ॥ 12 !

గ్ ఆం ప్రేహిలు దాదుల సభను నలరఁ జెన్న I పురిని-కన్యా ధ్వ్రవశీకానీభూమకృతిని I ఇండియను రెస్ట్ కా సను హృద్యవిధిని I మతీఁ చిదంబరపురమునఁ బురగృహమును I ఇంపు సొం పొండు జే యుగ నెంతయేని। ధనము గుప్పించి యిచ్చె నీ దాతృవకాళి। దిగ్దిగంతంబులం గీర్తి దీప్తి మిగుల। లలిని రాజ స రన్నామలయ్య చెట్టి

| 13 |

ఉం దానములక్-బ్రజాభ్యుదయ ధానవిధానములక్-బుధేండ్రస్ ! స్మానములక్-రహిందగుమ నంబుకుజల్పే కనల్పు శేముషీ ! (శ్రీ)నిధి-రాజ-అన్నామల చెట్టి-సు యోధుకు (సర్) నీతనిక్ సువి !

> ద్వానయహోషణాం పతవ దాన్యుని గాంచుటఁ "దొంటి భోజునిం ।

గాశము గాసి" మన్న నుడి కారము దూరము గాఁగ నేఁగడి౯

1 14 1

గ్రీ కోటి మాహ్యము లా స్త్రీ గల్లు ఘునుండకును I కోటి మాహ్యములకు మించు గొప్ప ధర్మ I ములు సలిపిన మహాదాత నెలమిం గాంచం I జెలంగె త్రమ్మ సరిస్పామల చెట్టిని-బళి!! # 15 #

గీ॥ తన మహాదానములు జేసి "దట్టిణ భర । తావనీమహాదాత"నాం దగిన బీరుద । మందె నన్నామల ్శేస్ట్రీ యాచరణము । లేక ప్రౌక్టుక్ను కొంద జివలం గాక ॥ 16

- సీ॥ శివకామనుందర్సేవితుం డగు చిదం బర్గటరాజు కృశం దలిర్ప । పగిది లన్నామలై నగరిని దగు (శ్రీ) ప శుపతి గౌరీశుండు శుభము లిడంగ । పితృసేవిత కరూరు శితికంతుం డగు పశు పతి శంకరుండు సంపదల నొసంగ । (శ్రీ) చిదంబరమునం జెలంగు (శ్రీ) తీల్లె గో విందరాజుపభుం డంద మీరాయు ।
- గీ॥ శ్రీకిలిత కూర్క వేంకటరెడ్డినాయ ! కాది మహానీయమి త్తుల్ సహాయ మిడ్రగ ॥ శ్రీమహితుడు రాజా సరన్నామలయ్య ! చెట్టి యందచందంబులు జెందుగాత
- కి అమె వేంకటాధినేతు: (ద్వ్యర్థి-అమెవేంక్ లే శ్వరస్వామి అనియు-(శ్రీ) వేంకటరెడ్డినా యు:మగారు అనియు) విహితో రాజా సరన్నామల చెట్టి: ! జీయా తృర్వత్ర సదా ! సర్వశుభ్మకలితో యశోభరిత:

|| 18 ||

17

ု వణయ పర్**ణా మ**ము.

జుపన చం[ద శేఖరరావు, (B. A. Hons)., B. Ed.,

1

చం။ విరియఁగఁ బారె నేత్రములు వేకువ తీవలరాలు ఫూలగా,

> జరుగవు ముంకు వెన్కలకు, చట్టురతీంద్రియ వస్తుచ్చితముల్

అరయుచు, బౌహ్యవిశ్వ సముదంచిత నంచిత రూపఖేలనల్

మర చెనా ! కాక — స్వాదురస మంజుమరందము నానుగోరెనో !

 2

చం \parallel కడలక — గద్దద స్వరము కంఠమున \digamma సినసీక — భావములో

పద్దిలముగా హృదంతరముఁ

బౌయగ నీక __ విషాదవేదనల్

చెదరగనీక — సేవం జీరు చెమ్మట

ముత్తేము లొత్తనీక __ క్ గదలఁగ నీశ్లి బాష్ప్రములు

కంటను రాల్చెడు "(చేముమూ_ర్హితో"

8

గీ॥ కంట నూరెడు జలముల గాననీక మృత్యు పథమున దృష్టి సారించి చూచి, తనదు బ్రియురాలి హృదయ సంతాపమడప భౌర్య మేవిధినో చెప్పుడలుచె విభుడు.

ఉం "జీవితమెప్పు ఉండా జీవికి జీవ్రముకావలె; దాని కింతగా

> సీవిధిం గుందనేలనె సఖి। శ్రీ. అకాలము మందుమాకుల౯

వైవక్, [పేమగాధలనె పలుగ్రము, జీవిత మంతనంత వేఁ

జోవు ఁ[బశాంత సీమలకుఁ, బుష్పపథమ్ముల '్రాపేమమూ<u>ర</u>్తి <u>మ</u>ైసా '

5

చం∥ **మనము** [బ**శా**ంత్నిన బాదల మావుక భూవన |పేమగాధరే

> వనరుహ నేత్రి! తెల్పుమింకు బాకృత కర్మము విస్మరించుచు౯

గని విన ఁజాలనట్టి యొక గాఢ తమః పథమందొ — వె**న్నె**లల్

తొణికెడి పూల దార్లనా యెదో యెటకో కడిపోదు...నింశ్యే.

6

్^{పేయసి} । ఇంత కాలమును ౖబేమలో నుంటిమి నీవు —— నేను —— ఈ

కాయము చీఁకటి \mathbf{E} బడ సుఖస్మిత కాంతులు మూ \mathbf{w} ంగా \mathbf{v} బడు \mathbf{E}

బోయెను జీవకాంతు లిఁకఁ

ఁజోవగ నీసు త్వదాత్సనన్ను; రాం

బోయెపు కాళరాత్రి గానుమూసిన న్ గని కుండు బోకుమా !

దిశ్లెల్ల్ల్ బాగమంచు దుప్పటులచే సంధింపంగా, సాంధ్యల్ల్

బశుప**జ్యా**దులు వోవు మార్గములు విస్పష్టంబుగా లేనటుల్

మస్ట్ గ్రామ్మను — జీకకటుల్ బలెసి — నే మార్గంబున్ బోవుదు్ —

వశము౯ డెప్పై మదీయ దేహముఁక నా భారంబు ైధెవంజెహే!

8

<u> ఏ</u>

నీ మృదు పాణి ఫల్ల**వము** లేసీ

సాంధ్య రోచిష్మతుల్ :___

్రీవాస్థాన మలుకరింపు — చర**మాం**గీ

^కృత్ప్ర**ూనావ**ళుల్

గావాయవ్వి ? [పశాంతి రేఖలు తమోగర్భచ్ఛిదా దశ్రముల్

. రావే

కాలము చేరువయ్యె ___

ఇటురా!

ಶಮ್ಸಾ !

సుధాస్య్రాదిసీ!

లలిత కిశోరకంఠ తరళధ**్వ**ని మించు విపంచి గొం**తులో**ం

గలఁగి విలాపముల్ సలుపఁగాఁ ఁదగునమ్మ ? గఖీర ఫీరతా

నిలయమ వీవు — మృత్యు వరణీయ పవిత్ర ముహూ ర్తమిద్ది — క

న్నుల డడి వెట్టుకొన్నచ్ — మనో మమాశాంతి చలించిపోవదే!

10

కలువ పిసాళిసీలిమలు కంటికొలంకుల న్నిడవోయెనే!

మిల మల లాడు తారలు నిమాలిత లోచన పక్ష్మల్మాగమం

దలముకొనంగ, నిశ్చల తమోంచల రేఖలు దిద్దినాహొకో !

హలుకవు — చేరరమ్మనవు — బాష్పకణమ్ముల నాదు చి(తమున్

మలచఁగ — దండ్రగుచ్చఁగ — నమాయకవౌటఁ దలంచినావొళో!

11

హృదయ విపంచి తంతుల నిదేలనే κ^{\prime} టను మాటకుండ κ^{\prime} ం

జి₍ద్పలొనర్చి — **పైవి**సరి — శీర్ణము జేందు బాప్పథారల౯ ; గదలఁగజాలఁ — గంఠగత కార్క్యము హెచ్చఁగఁ జొచ్చాఁ — బేయసీ విద్దియ శశాంకు నొక్కతతి వీశ్రణ సేయఁగ మోమునె త్రవే!

12

ఇఁకపయి వెన్నెలల్ బాదల నీయఁగఁ బూగ్డిమరాదు; చీఁకటుల్

వికవిక నవ్వకో౯ — పగళులే నిశలైన జగత్ శృశానమం

దొకఁడ, ననంతమోహ జగవు**త్స**వ మూలములైన **నీ**వు పె

ద్దకనులు — రెంపు చుక్రలయి దారిని జూపుగు, జూదు (పేయసీ!

13

అసదృశ తావకీన హృదయాంబర మంమన ఁబూల వీవనల్

విసరిన యట్లు — తెక్కలను విచ్చుక పారఁగ నెంతు; శృంఖలా

పసరిత పుత్రవైభవము **భావ**న సేయఁగ, నీ**యె**డంద నల్

దెనలను మబ్బులే — మెఆఫు దివ్వేయుం దోయను త్రోవుజూపుగ్."

అనుచు (బియురాలి దుఖాగ్ని నహనయింపు దలచెనేకాని — తనగతిం దలపండాయె; మృత్యు తేజుబ్పసారముల్ రేకు విరిసి కటికి చీడకటుల్ వ్యాపించింనటులం దోచె.

15

"మాయము — అంధకారము — అమానుష పుష్టము — మృత్యు దేవతాధ్యేయ కరావలంబిత మదేతెర — అల్లదె — మధ్య జారెమ్ ; మాయ శరీరధారణము మాయునె ? అయ్యనామి! లేవనెత్తుమా ... [బేయసి! లేవనెత్తుమంక [బేమ దృగంచల చంచల చ్చవి౯!"

16

అనుచు సఖివిలోకనము నారయు చుండెనెకాని, ఆమెచే

తనపరి**వ**్తనమ్ము — పరితాప దృఢత్వ**ము** — [మేమ దార్డ్యము౯ —

మనమున ఁబర్వు సంత్రుభిత మార్గముల్ల్— గనఁ జాలఁ డయ్యయా ।

కనులలొ చంచలత్వము...ముఖంబున జీవకళల్ నశించెంబో I

పలుకుల (బేమ నిస్వనము బాహిర వెట్రను ; విశ్వవీథికా

విలసన రాగదృశ్యముల వీశుణ సేయను; ముందు వెను-ల౯

జెలఁగెడు భావవైరముల చిక్కు సడల్పను; కానీ—యేదియో

్రపళయ మహార్బాణం బెదదం బర్వుచు నుండుట ద్యోతకమ్మనుకా.

18

ఆటులొక నిముసంబుగడచె...అంతనామె సలలి తాంగంబు విభుని వక్షమున్నవాలఁ బ్రణయ వేదిక బలిజేసె మాణములను;... అపుడు....విశ్వమే కలతలో నటమటించె.

19

కనులను విప్పె నల్షిశలు

గన్లోనే నాత్య; (పేమనాదమే

వినఁబడె మృత్యు ఘోషముగ; విశ్వవిపంచి గళమ్ము భిన్నమై

వినిచె లయాంత తాండవిత

భీకర ফুరవ సింహనాదమై;

్థ్యయము భగ్నమానికు

బ్బుబు చర్మత్రమ్ తారుమారణే ?

అమలిన శాంతి భాజన తదానన**ేఖ,** అశ_క్త జీవలో

కమునకు **మాన బోధ మొ**సఁగ౯గని... ఆరేడు దీర్ఘను ప్రవే

హముపయి [వాలె—నంతనయ నాబ్జము లాగక, పొంగివచ్చును:

ఖము ది గ్రమింగి వైచుటకుంగా... ముకుళిం చెను మృత్యుసంధ్యలో.

21

స్థితి పోవని చిరహ్షిక్సంగమంను నిదురహోయొకు వాంది గెప్పినది తమము; రాలి పోయొను రెండు తారకలు మింట; చేతు లెత్తి ఆశీర్వదించినది శాంతి ॥

ಒಂ

कर्ण क्यू० है।

മംഗളാഞ്ജലി By KUTTAMATH

- "രാജാ സേർ"ബിരുദപ്രകാശനിധിയാ-മണ്ണാമലച്ചെട്ടിയാർ പൂജാനാ നിജ ഷഷ്ട്രിപൂത്തിമനമി-ന്നാരോഹണം ചെയ്തവേ, സാജാത്വ പ്രണയേന തൽകൃതകലാ-ശാലാധിവാസാൽ, കരാം-ഭോജാഗ്ലിഷ്ഠക്ക ഭാഷകഠംക്കു പുളകം ചേരുന്ന തൽ സ്മാരകം.
- 2. ആയുപത്തുളങ്ങളായിര, മവ-ക്ലിഷ്പപ്പിപ്പത്ത്വത്സവം ശ്രീയുണ്ടാക്കി,വരുന്ന സവ്വിദ്യുമീ മാന്വ്യൻ പ്രവേശിക്കവേ ഈ യൂഴത്തിലുമെത്രയും മഹിതമായ് മംഗല്വമേകാൻ കുപാ-പീയൂഷം പൊഴിയേണമേ സുമധുരം വാശ്രേവിയും ലക്ഷ്പിയും!

രഥബന്ധം

By C. N. A. RAMAYYA SASTRI, M.A., TRIVANDRUM.

കലികല്പപ്പ സോപാനം അന്വാദ്രശതുഭം ഭിനം വിള്യാ ശ്രീകരമാംവണ്ണം തീത്തിടും മൂലമുത്തമം.

			ല്ല	ഷ			
		යා	S	<u> </u>	സോ		
	ലി	β	ക	Ø	6 0	പാ	
ക	സ്ത്വാ	ശ്രീ	ශු	ല	മാം	ദി	നം
	അ	ഭൂാ	\$ 0	Zą.	വ	നം	
		വി	ത്തീ	ത്ത	ans of		
			തീ	200		-	

തമിഴരും മലയാളികളും

By P. ANANTAN PILLAI, M.A., TRIVANDRUM.

ഭാഗ്വസിദ്ധമായ ധനവിഭവം ഔചിത്വപ്പൂവ്വം വിനിയോഗിക്കുന്നതിൽ ബദ്ധശ്രദ്ധനം, അതുഭാരനം, വഭാന്വനം ആയ രാജാ സർ അണ്ണാമലച്ചെട്ടിയാരുടെ ഷഷ്ട്വപ്പൂത്തിപ്രമാണിച്ചു പ്രസിദ്ധപ്പെടുത്തുന്ന ഈ "സുവണ്ണോ.പഹാര"ത്തിൽ തൽഭാരവാഹികളുടെ അപേക്ഷപ്രകാരം ഈ ലേഖനമെഴുതുന്നതിന് എനിക്ക് അനല്പമായ സന്തോ ഷമുണ്ട്. ഒരു സ്വതന്ത്രസവ്വകലാശാല സ്ഥാപിക്കുകയും അവിടെ തൻറ ഭാഷാഭിമാനസ്തംഭമായി പരിലസിക്കുന്ന നാട്ടുഭാഷയിലെ ഉപരിപഠനപദ്ധതിയും, അത്വൽക്ഷുമായ സ്ഥാനം കല്ലിക്കുകയും ചെയ്ത ആ വിശിഷ്ടമനോഗതി എത്രതന്നെ പുകയ്തിയാലും മതിയാകുന്നതല്ല. ആകയാൽ ഈ 'സുവണ്ണോപഹാരം' ഭോധാ അത്വവത്തായ ഒരു സ്താരകമായി വത്തിക്കുമെന്നുള്ളതിനെ സംശയമില്ല.

തമിഴതം മലനാട്ടുകാരായ കേരളീയതം ക്രിസ്സാബ്ബത്തിനെറ ആരംഭകാലത്ത് വളരെ അടുത്തു വതമാറിയിരുന്നവരാണു്. അകൽ ച്ചയുണ്ടായത്ര് ഇവർ മലയാളികളായിത്തീന്നതിനശേഷമാണെന്നു വി ചാരിക്കേണ്ടിയിരിക്കുന്നു. കുറേക്രൂടി നിഷ്യഷയാ വരിശോധികയാ ണെങ്കിൽ കൊല്ലവഷാരംഭത്തിനശേഷമേ 'മലയാളം' എന്നം 'മലയാ ളിക്കം' എന്നം വ്യവഹരിക്കുവാൻ ഇടയായിട്ടുള്ള എന്നാണു് എൻെറ അഭിപ്രായം. അതിനമുനു കേരളീയരെ മലയാളിക്കം എന്നു പരാ

ചരിത്രാനേചഷണംകൊണ്ട് ഇതുവരെ ശരിയായ തെളിവു ക്ക ലഭിക്കാൻ സാധിക്കാത്ത ആ അന്ധകാരമയമായ കാലത്ത്,— അതായത്ര് രാമായണകാലം എന്ന പൌരാണികർ കണക്കാക്കീട്ടുള്ള കാലത്തിനശേഷം, ഏതാനം ശതാബ്ദങ്ങരുക്കിടയ്യൂം—തമിഴകത്തെ മുവരതുവാഴ്ച ഒരുവിധം ചരിത്രപ്രാധാന്യം അർഹിക്കുന്നതാണല്ലോ. അന്നത്തെ 'ചേര'വും 'ചേരന്മാ'രും അധികകാലതാമസം കൂടാതെ 'കേരള'വും 'കേരളീയ'രും ആയിത്തീന്റ. അതിനത്തരവാളികഠം ആയ്യന്മാരാണെന്നുള്ള തിൽ പക്ഷാന്തരമില്ല. ഈ ചേരന്മാരുടെ ഭാഷ, മതം, സമുദായസ്ഥിതി, ഭരണപരിഷ്ലാരം മുതലായവ ഏറിയക്രവും തമിഴ്ചൈലതന്നെ ആയിരുന്നു എന്ന് അഭ്യൂഹിക്കാവുന്നതാണു്. പൈതുകാരാധനത്തിനു പുറമെ ശൈവമതത്തിന്റെ ആഭിരൂപവും അന്നു തമിഴക്തെ നടപ്പായിരുന്നു. ചേരന്മാർ ആഭികാലത്തുതന്നെ നാഗാരാധനക്കാരായിരുന്നോ എന്നു തീച്ച് പറവാൻ നിവ്വത്തിയില്ല. എന്തായാലും അന്നോ അതിനടുത്തകാലത്തോ നാഗാരാധന പ്രബല മായി അംഗീകരിച്ചിരുന്ന ഒരു മനുഷ്യവഗ്ഗത്തെ നാമിവിടെ കാണന്നു ഒണ്ടുന്നു പറഞ്ഞതീരു.

ക്രിസ്തുവിനമുമ്പുള്ള ആദിശതകങ്ങളിൽ കേരളത്തിലെ പച്ച്ത പാശ്ചങ്ങളിൽ വേട്ടയാടി വസിച്ചിരുന്ന 'കുറവർ' എന്നു തമിഴുപണ്ഡി തന്മാരും 'നാഗന്മാർ' എന്നു കേരളീയചരിത്രകാരന്മാരും അഭിപ്രായ പ്പെടുന്ന അന്നത്തെ കേരളിയർ ആരുതന്നെ ആയിരുന്നാലും അവരെ അക്കാലത്ത് വടക്കുനിന്നു വന്ന ആച്ഛന്മാർ അഭിമുഖ!കരിച്ചു എന്നുള്ള തിനു സംശയമില്ല. പ്രസ്തുത കേരളീയർ തമിഴിന്റെ പൂവ്വ്യര്വതോട് ഏതാണ്ടു സാമ്യമുള്ള ഒരു ഭാഷ സംസാരിച്ചിരുന്നു എന്നല്ലാതെ പാ ണ്ടിനാട്ടിൽ നടുപ്പായിരുന്ന തമിഴായിരുന്നു അവരുടെ വ്വവഹാരഭാഷ എന്നു പറയാവുന്നതല്ല. ഈ സംഗതി സുക്ഷ്മമായി പരിശോധിച്ചാൽ ദക്ഷിണ ഇൻഡ്യയിലെ ആദിമനിവാസികരം ആശയവിനിമയംചെയ്യ തെ അവരിഷ്ത്രഭാഷയെങ്കിലും ഉണ്ടായിരുന്നു എന്നു സ്ഥാപിച്ചേ കഴിയൂ. ഇതിന് 'മൂലദ്രാവിഡഭാഷ' എന്നു പല പണ്ഡിതന്മാരും നാമകരണം ചെയ്തിരിക്കുന്നതു കുറേക്രുടി നിഷ്ട്യഷ്ടമായ തെളിവു സിദ്ധി കുന്നതുവരെ സചീകരിക്കേണ്ടിയിരിക്കുന്നു. ആ ഭാഷയുടെ പൂവ്വത്രവം ഇപ്പോരം വല്ല മലയിലോ കാട്ടിലോ വല്ല മനുഷ്യവഗ്ഗങ്ങളും സംസാരി ക്കുന്നതായി കണ്ടുപിടിക്കുന്ന പക്ഷം കേരളചരിത്രത്തിലെന്നല്ല ഭക്ഷി ണേന്ത്വാ**ചരിത്രത്തില**ം അതൊര അമൂല്യനിധിയായി കരുതാവുന്ന താണ്.

മുവരതുനാട്ടുകഠം ചേര, പാണ്ഡ്വ, ചോളങ്ങളായിരുന്നു എന്ന തിൽ പക്ഷാന്തരമില്ല. ചേരം തന്നെയാണു് കേരളമെന്നു പറഞ്ഞു തമിഴക്ക് അന്നു മലയാളരാജ്യത്തേയ്ക്കു. കടക്കുവാൻ രണ്ടു വല്ലോ. മൂന്നു മാഗ്ഗങ്ങളേ ഉണ്ടായിരുന്നുള്ള. വേഗവതിനളിതിരത്തുകൂടി പടി ഞ്ഞാട്ട സഞ്ചരിച്ച് പഴനിമലയിലോ, കുറേക്രടി തെക്കോട്ട നിങ്ങി സഹൃപവ്വതപങ്ക്കികളിലെ ഇടുക്കുകളിൽ കൂടിയോ വളരെ തെക്കു മാറി ആരുവാമൊഴിമാഗ്ഗമായോ അവക്കിവിടെ വന്നുപേരാമായിരുന്നു. പഴനിപ്രഭേശത്തുകൂടി കേരളത്തിലേയ്യും കടന്നു എന്നു പറഞ്ഞാൽ ഈ രാജ്യത്തിനെറ വിസ്തതിയെപ്പററി അപ്പൊഴപ്പോരം ഭിന്നാഭിപ്രായങ്ങ ളണ്ടായിരുന്ന സ്ഥിതിയ്ക്കു് എളുപ്പത്തിൽ നമുക്കു ഗ്രഹിക്കുവാൻ വിഷ എന്നാൽ മേല് മലനാട്ട് അഥവാ "കൊങ്ങു്" എന്നപേ രായ പ്രദേശം അന്നു ചേരരാജ്വത്തു ഗപ്പെട്ടിരുന്നു എന്ന കഥ വിസ്മുരി ച്ചാണു് ചിലർ കേരള ചരിത്രതത്വങ്ങഗം വെളിപ്പെടുത്തീട്ടുള്ള തു്. സേ ലം, കോയമ്പത്തൂർ എന്ന ഇപ്പോഴത്തെ രണ്ടു ജില്ലകളും ചേന്ന ഭ്രഭാഗ കൊങ്ങൻ, കൊങ്ങർകോൻ വ്യാന്നാക്കെ മായിരുന്നു "കൊങ്ങു്". ചേരരാജാക്കുന്നാക്കു സ്ഥാനമുണ്ടായിരുന്നതു് വെറുതെ ആകയില്ലല്ലോ. കേരളീയചരിത്രകാരന്നാർ 'കൊങ്ങ്' തിരെ അവഗണിച്ചതുപോലെ തമിഴു**ചരിത്ര**കാരന്മാർ കൊങ്ങിന് ചേരസാമ്രാജ്വ**ത്തിൽ ഒരു** പ്രധാന സ്ഥാനം നൽകുകയും ചെയ്തു.

മലയാളികളുടെ ആദിചരിത്രം മനസ്സിലാക്കുന്നതിന തമിഴു സാഹിത്വത്തെയാണ് അവലംബിക്കേണ്ടിവന്നിരിക്കുന്നതു് എന്നു ചിലർ വിലപിക്കുന്നതായി കണ്ടിട്ടുണ്ട്. നമ്മുടെ ഭാഷയ്ക്ക് അന്നു മലയാളം എന്ന പേരില്ലായിരുന്നു എന്നു പറഞ്ഞുവല്ലോ. അതിനെ 'കൊടുന്നുമിഴ്'' എന്നു തമിഴു വൈച്ചാകരണന്മാർ വ്വവഹരിച്ചു കാണു ന്നത്ര് തമിഴിന്റെ അപബ് രംശങ്ങൾ ധാരാളം അതിൽ കലന്നിരുന്നതു് തമിഴിന്റെ അപബ് രംശങ്ങൾ ധാരാളം അതിൽ കലന്നിരുന്നതുനിമിത്തം ആയിരിക്കാം. ഈ വാദത്തിൽ ഇപ്പോൾ പ്രവേശി ക്കണം എന്നു വിചാരിക്കുന്നില്ല. കൊടുന്നുമിഴിൽ കൃതികൾ കാണുന്നില്ലെന്നു കേരളപാണിനിപോലും സമ്മതിച്ചിട്ടുണ്ടു്. ഏഴെട്ടു ശതാബ്ബൂളിലായി ഒരു ഭാഷയ്ക്കു് ചുരുക്കുിയതോതിലെങ്കിലും ഒരു സാഹിത്വമുണ്ടോ

യില്ലെന്നു പറയുന്നതു യുക്തിക്കു ചേരുന്നതല്ല. എന്തെന്നാൽ പരി ഷ്ടാരസാരഭൂതമായ സാഹചയ്യവും പരിതസ്ഥിതിയും ഉണ്ടായിരുന്ന സ്ഥിതിയ്ക്ക് ഒരു ജനസമുഹത്തിന്റെ വ്വവഹാരഭാഷ, അതിൽനിന്നെ ല്ലാം ഒഴിഞ്ഞു മാറിനിന്നിരിക്കുവാൻ തരമില്ല. നമ്മുടെ മലയാളസാ ഹിത്വം പരിശോധിക്കുമ്പോഗം അതിന്റെ ചില ഘട്ടങ്ങളിൽ കണ്ടെ ത്തുന്ന് നാടോടിപ്പാട്ടുകൾ നാം സ്വീകരിക്കുകയോ ഉപേക്ഷിക്കുകയോ വേണ്ടത്ര്? ഇംഗ്ലീഷുസാഹിത്വത്തിന്റെ വൈപുല്വത്തിന് ഹേതഭ്രത മായിക്കാണുന്നതു് ഇത്തരത്തിലുള്ള നാടൻ കവിതയല്ലേ? ആകയാൽ കൊടുന്തമിഴിലുണ്ടായ കൃതികരം മലയാളികളുടെ ദൃഷ്ടിഗോചരമായി ത്തീന്നിട്ടില്ലെന്നുള്ള ഏകകാരണത്താൽ അവയുടെ അഭാവം തെളിയി ക്കാവുന്നതല്ല. ഈ വഴിയ്ക്കാലോചിച്ചാൽ അന്നത്തെ കൊടുന്തമിഴ് സാഹിതൃശ്രപംപ്രാപിച്ചതിനെറ ഒരു മക്കടോഭാഹരണമായി "രാമ ചരിതം" ഉദാഹരിക്കാവുന്നതാണു്. തമിഴോ മലയാളമോ എന്നൊരു 'വടം പിടുത്തം' ഈകൃതിയെ സംബന്ധിച്ചിടത്തോളം ഇന്നും ഊർജ്ജി തമായി നിൽക്കുന്നത്ര് ഈ സമാധാനംകൊണ്ടു പരിഹരിക്കാവുന്നതും ആണ്. ഈ പ്രസംഗം ഇവിടെ നിൽക്കട്ടെ.

മലയാളികളുടെ പൂവ്വന്മാരായ കേരളീയർ ഏറിയ ക്രറം കേര ളത്തിൽ തന്നെയാണ് വസിച്ചിരുന്നത്. കൊങ്ങുനാട്ടിലെ ചേരനാർ തമിഴർതന്നെയായിരുന്നോ എന്ന സംശയിക്കാൻ വഴിയുണ്ടു്. എന്താ യാലും അവക്ക് കേരളത്തിലെപ്പോലെ ആയ്യന്മാരുമായി ക്രടിക്കഴിയു വാൻ ഇടയായിട്ടുണ്ടോ എന്നു തിച്ച്പറയുവാൻ പാടില്ല. കൊങ്ങു രാജ്വത്തിൻെറ തലസ്ഥാനമായിരുന്നു 'വഞ്ചിക്കരുവൂർ'. അവിടെ ഇരുന്നുകൊണ്ടു് ആ രാജ്വംമാത്രം ഭരിച്ച രാജാക്കുന്നാരെ കേരള ചക്രവ ത്തികഠം എന്നു പറയാമോ എന്നു സംശയിക്കേണ്ടതുണ്ടു്. പെരു ഞ്ചോറുമയൻ തുടങ്ങിയ രാജാക്കുമാർ എല്ലാവരും കേരളത്തിൻെറ മല്യൂഭാഗത്തായി കടൽത്തിരത്തു സ്ഥിതിചെയ്യുന്നു തിരുവഞ്ചിക്കുളത്തു വാണിരുന്നു എന്നും പറയാവുന്നതല്ല. ചേരമാൻകോട്ട, ചേരമാൻകോ വിൽ, ചേരനല്ലർ ഇങ്ങനെ അനവധി സ്ഥലനാമങ്ങളും, സ്ഥാപന യിരിക്കുന്നു എങ്കിലും, പ്രാചിന ചേരമാജധാനി എല്ലായ് പ്രോഴം തിരു വഞ്ചിക്കളാതന്നെ ആയിരുന്നു എന്നു സ്ഥാപിക്കുവാൻ വളരെ ആലോ ചിച്ചിട്ടുവേണം. ദേശാഭിമാനത്താൽ മതിമറന്നു പോകുമ്പോറം ചരിത്ര വസ്തുതകളെ ധിക്കരിക്കുന്നതു കഷ്ടമാണല്ലോ. ആകയാൽ ക്രിസ്താബ്ലാ രാഭത്തിൽ ഉണ്ടായതായി തമിഴുപണ്ഡിതന്മാർ മിക്കവാറും തിച്ചപ്പെ ടത്തിക്കഴിഞ്ഞിട്ടുള്ള 'സംഘം കൃതിക'ളിൽകൂടി പ്രതിഫലിച്ചു കാണുന്ന ജനങ്ങറം ഇപ്പോഴത്തെ മലയാളികളുടെ പൂവ്വ്വിതാമഹന്മാർ തന്നെ ആയിരുന്നുവോ എന്നു ഖണ്ഡിച്ചു പറയാവുന്നതല്ല. അങ്ങനെ വരു മ്പോറം പ്രസിഭ്യ ചെന്തമിഴുമഹാകാവ്യമായ "ചിലപ്പതികാര"ത്തിനും കേരളിയകൃതിയെന്നുള്ള അഭിപ്രായത്തിന് അവകാശമില്ലാതെ വന്നേ ക്കാം.

ഇപ്പോഗം നാം മലയാളികഗം എന്നു സാധാരണയായി കേര ളത്തിൽ അധിവസിക്കുന്നവരെ അടക്കിപ്പറയാരണ്ട്. ആദികേരളിയ രിൽ ഭൂരിഭാഗവും ജാതിമതഭേദമില്ലാത്ത ഒരുവക ജനങ്ങളായിരുന്നു എ ന്നാണു് അനേചഷണത്തിൽ അറിയുന്നതു്. അവർ ആയ്പ്രമാരമായി സമീപിച്ച കാലം മുതൽ വൈഭികഭേവന്മാരേയും ഭേവിമാരേയും ആരാ ധിക്കുവാൻ തുടങ്ങിയതായിക്കാണുന്നു. ഈ ആരാധനക്രമങ്ങൾ തമി ഴകത്ത് ആദ്യമായി പ്രാബല്യത്തിൽ വന്നുകാണുന്ന<u>ത്</u> കേരളത്തിലാ തമിഴരുമായി അകലുവാനുള്ള ഒരു പ്രധാനകാരണംതന്നെ പില്ലൂാലത്ത് ഇടവിടാതെ സംഭവിച്ചുകാണുന്ന ആയ്യസംസഗ്ഗാതന്നെ ആണെന്നു പറയേണ്ടിയിരിക്കുന്നു. ആയ്പ്രന്മാർ ചേരനാട്ടിലേയ്ക്കു വ ന്നതു് കിഴക്കൻ വഴിയായാലും ശരി പടിഞ്ഞാറൻ വഴിയായാലും ശരി, കേരളത്തിൽ പ്രവേശിച്ചതിനശേഷം മററു പ്രദേശങ്ങളേക്കാഠം അധിക മായ താൽപ്പയ്യം **അതി**നോടു കാണിച്ചു എന്നുള്ളതിനു തക്കമില്ല. ആ യ്യസമ്പക്കുത്താൽ പൊടുന്നനെ തമിഴർ മലയാളികളിൽനിന്നും അകന്നു പോയി എന്നു പറയുന്നതു് അബദ്ധമാണെങ്കിലും, കാലക്രമത്തിൽ അ **ങ്ങ**നെ സംഭവിച്ചു എന്നു തിച്ചപ്പെടുത്താവുന്നതാണു്. തേമിഴുസാഘം' കൃതികളെ ആസ്പദമാക്കി തമിഴരും മലയാളികളും ഒരേ വഗ്ഗ്ഗക്കാർതന്നെ ആയിരുന്നു എന്നും ഒരേ ഭാഷതന്നെയാണു് അവർ സംസാരിച്ചുവന്നതെന്നും മററും വിധി കല്പിക്കുവാൻ ഒരു ന്വായവും കാണുന്നില്ല. തമിഴു കവികഠം കേരളത്തെപ്പററി അനവധി പരാമർശ ക്കാരം ചെയ്യുന്നുണ്ടെന്നു സമ്മതിച്ചേതിരു. എന്നാൽ കേരളത്തെ പ്രററി അറിവുണ്ടായിരുന്നതിനേക്കാഠം അധികം അജ്ഞതയാണു് അ വർ വെളിപ്പെടുത്തീട്ടുള്ള ഇ്. അതിനവരെ കുററം പറയുവാനുമില്ല. അവരിൽ ഭൂരി പക്ഷവും കേരളത്തേയും അവിടത്തെ നാടുവാഴികളേയും പുകൃശ്ശന്നുള്,

"ഭീപസ്താഭാ മഹാശ്ചയ്യാ നമ്മഠംക്കും കിട്ടണം പണം"

എന്ന മിതിയിലാണ്. സ്കൃതിയ്ക്കു വിധേയരായ ചേരന്വപന്മാർ അവക്ഷ് കല്പവ്വക്ഷതുവ്വനാരായിരുന്നു എന്ന് പാട്ടുക്ക വിശദമാക്കുന്നു. നാല്പ ത്രത്യായിരാപാന്ത്, രാജഭോഗാംശം, ഒരു കുന്നിനേൽ കേറിനിന്നു നോക്കിയാൽ കണ്ണെത്തുന്നിടത്തോളം ഭൂമി—എന്തിനധികം—സ്ഥന്ത പത്രണപ്പോലും യശുപ്പാത്ഥികളായ ഈ രാജാക്കനാർ സ്കൃതിപാഠപട്ട ക്കളായ കവികരംക്കു നൽകിട്ടുള്ളതായി പതിററിപ്പത്തു്, പുറനാന്തുവ് മുതലായ സംഘംകൃതികളിൽ കാണാവുന്നതാണ്. ഈ പാട്ടുകരം സാ മാന്വുമായി ചെന്തമിഴിൽ രചിതങ്ങളായിരുന്നു സ്ഥിതിയ്ക്കു് അവയുടെ അന്തരാത്ഥം വഴിപോലെ ഗ്രഹിക്കവാൻപോലും മലനാട്ടുകാക്കു് കഴിഞ്ഞിരുന്നോ എന്നു സംശയമാണ്. പാട്ടുകരം പാടിയവർ സമ്മോ നവുംകൊണ്ടു പോയാൽവിന്നെ അവരെയും അവരുടെ കൃതികളേയും കാണുവൻ പ്രയാസമായിരുന്നു. ചുരുക്കം ചിലർ കേരളത്തിൽത്ത നന്നു സ്ഥിരവാസം ഉറപ്പിച്ചിരിക്കാം. എങ്കിലും മലയാളികളുമായി സൈചരം സഹവസിച്ചിരുന്നോ എന്നു സംശയമാണ്ം.

ഈ പാട്ടുകാർ വിമർശിച്ചിട്ടുള്ള തമിഴുപണ്ഡിതന്മാർ പറയു ന്നതു ശരിയാണെങ്കിൽ അക്കാലത്തെ മലയാളികളും തമിഴുരുമായി യാതൊരുകായ്യത്തിലും വലിയ അന്തരമുണ്ടായിരുന്നിരിക്കാൻ തരമില്ല. 'ചിലപ്പതികാരം'പോലെയുള്ള തമിഴു മഹാകാവ്യങ്ങാം അവക്കു വായി ച്ചുരസിക്കുവാൻ പ്രാപ്തിയുണ്ടായിരുന്നു. ചേരലാതൻ, കെഴുക്കുട്ടുവൻ, ചെങ്കുട്ടുവൻ, അന്തുവൻ, പെരുഞ്ചേരൻ, മാകോര് മുതലായ പേരുക രാജാക്കുന്മാക്ക് സർവസാധാരണമായിരുന്നു. രാജകീയചിഹ്നമായ വൃക്ഷം വെട്ടിച്ചറിക്കുക, കൊററവ എന്ന യുദ്ധദേവതയെ ആരാധിക്കുക എന്നിക്കുനെയുള്ള അനവധി സമരതന്ത്രക്കും അന്നു പ്രയോഗത്തിലി രുന്നുവത്രെ! കവികളുടെ പേരുകാം എന്നുവേണ്ട അവരുടെ കൃതികളും ചെന്തമിഴുതന്നെ! സംഗീതവും താളമേളങ്ങളും തമിഴുപ്പാഥാനക്കുളെ അനുകരിക്കുന്നുവയാണും. ആകപ്പാടെ ഇതൊരു ചെന്തമിഴുരാജ്യമായിരുന്നു എന്നു തോന്നും.

ഇവക്കും പ്രമാദംപററിപ്പോയി എന്നു പറയാവുന്നതാണൊ? പാട്ടുകളിൽ വണ്ണനയ്യും വിഷയങ്ങളായിത്തിന്നിരിക്കുന്ന സംഭവങ്ങളും, പ്രസ്ഥാനങ്ങളം, ജനങ്ങളം എല്ലാം കേരളത്തിൽത്തന്നെ ഉണ്ടായിരു അതാ അതെല്ലാം സങ്കല്പമാത്രമാണോ? കൊങ്ങുമാജ്വ ത്തിന്റെ തലസ്ഥാനമായിരുന്ന വഞ്ചിക്കരുവൂരാണു് വർണ്വസ്ഥല മെങ്കിൽ ഇതൊക്കെ ഒരുവിധം ശരിപ്പെടുത്താമായിരുന്നു. എന്നാൽ അതിനു നമ്മുടെ കേരളിയവണ്ഡിതന്മാർ സമ്മതിക്കുന്നതുമല്ല. ധമ്മസങ്കടത്തി വെന്താണ് ചെയ്ത? കേരളത്തിൽ കേട്ടുകോവിപോലു മില്ലാത്ത കാച്ചങ്ങരം ഇവിടെ നടന്നതായി അംഗീകരിക്കുന്നതെങ്ങനെ? അങ്ങനെ കേട്ടകേരംവിയെങ്ങിലുള്ള വലതും നാം സചീകരിച്ചിട്ടുണ്ടെ ന്നതിലേയൂം 'ചേരമാൻ പെരുമാ'ളം 'ത്രീശങ്കരാചായ്പ്'രും നല്ല തെ ളിവുകളായിരിക്കുന്നു. കിംവദന്തിക്കം ശരിയാണോ എന്നുനചപ്പിക്കും തോരം നമ്മുടെ വിശചാസ്വതയ്ക്കു ബലം കൂടിവരുന്നു എന്നു പറഞ്ഞോ എന്നാൽ സംഘംകതികഠം മുമ്പിൽവച്ചുകൊണ്ട് നാം നട ത്തുന്ന അനേചഷണം വിചരീതഫലമാണ്ട് നൽകുന്നത്ല്. ഉഭാഹരണ ത്തിനു് 'ചെം കുട്ടുവൻ' എന്ന ചേരരാജാവിൻെറ കായ്യം നോക്കാം. അദ്ദേഹം പേരുകൊണ്ടും മററും സാമാന്വ്യം ഭേടമാണു്. കേരംവി എപ്രകാരമിരിക്കുന്ന എന്നു നോക്കുക. കേരളിയർ അദ്ദേഹ ത്തെ ഒരു 'പെരുമാരം' ആചിട്ടാണം' അല്പമെങ്കിലും ധരിച്ചുവച്ചിട്ട ള്ള ഇ്. 'ചെങ്ങുററപ്പെരുമാരം' എന്നും 'ചെങ്ങുന്നൂർ' എന്നും ഒരു **ചരിതുപങ്ക്തി**യിൽ കാണുന്നു. ഇതെല്ലാം കൊങ്ങരാജ്വത്തു നടന്ന കഥ ഐതിഹ്വമായി പരിണമിച്ചതല്ലയോ എന്നു സംശയിക്കുന്നു.

കുറച്ചൊക്കെ കേരളപരമായും ശരിയാണും. എന്തെന്നാൽ ഈ ലേഖ നത്തിൽ അന്വത്ര സൂചിപ്പിച്ചതുപോലെ കൊങ്ങായിരുന്നു അന്നു കേര ളത്തിൻെറ പ്രധാനവിഭാഗം. അവിടെ ഇരുന്നുകൊണ്ടു് ചെങ്കുട്ടുവൻ കേരളം ഭരിച്ചതായി വിചാരിക്കുവാൻ പല ന്വായങ്ങളുമുണ്ട്. വഞ്ചിക്കുളമായിരുന്നു ചേരന്മാരുടെ വഴയരാജധാനി എന്നു വലരും തെററായി ധരിച്ച കൂട്ടത്തിൽ ഒരു കാലത്തു ഞാനും ഉശപ്പെട്ടിരുന്നും. എന്നാൽ തിരുപ്പതിയിൽ നടന്ന പൌരസ്തുസമ്മേളനത്തിൽ മഹാ വിദചാൻ ആർ. രാഘവച്ചുങ്കാരുടെ പ്രസംഗം കേട്ടതിനശേഷം നടത്തി യ ഗവേഷണമെല്ലാം വഞ്ചികുരുവൂരിന് അനുകൂലമായിരുന്നു എന്നു പ റഞ്ഞുകൊള്ള ട്ടെ. സ്വദേശഭക്തി പരസ്വാപഹരണത്തിൽ കലാശി ക്കരുതല്ലോ. നമ്മുടേതു നമുക്കിരിക്കട്ടെ. തിരുവഞ്ചി ക്രളം പിൽക്കാ ലത്തു പ്രധാന രാജധാനിയായിത്തിന്നു എന്നതിനു തക്കമില്ല. മാൻ കോട്ടയും മററും ഉദ്ധരണഗതിയിലിരിക്കുന്നതു് അഭിമാനഹേതുകം തന്നെ! ചെങ്കുട്ടുവൻ ഭരിച്ചതും 'ഇളംകോ അടിക്കം' ചിലപ്പതികാര ര പനകൊണ്ടു ധന്വ്യധന്വമാക്കി ത്തിത്ത തും വഞ്ചിക്കരുവൂർ തന്നെയാണു്. പിന്നീടു തലസ്ഥാനം മാറിയതോടുകൂടി പഴയരാജധാനിയിലെ പല സ്ഥാപനങ്ങളം സങ്കല്പമാത്രമായിട്ടെങ്കിലും മാററി പ്രതിഷ്ഠിക്കുവാൻ ഇടയായി. കൊടുങ്ങല്ലർ ശിവക്ഷേത്രവും അതിലെ 'പത്തിനി'പ്രതി ഷ്യയം മററും ഈ വഴിപിടിച്ചാലോചിച്ചാൽ സുഗമമായിത്തീരും.

ചൊകുട്ടവൻ പെരിയാററിൻ തീരത്തുള്ള വിശാലമായ മണൽ പ്രറത്തു പാളയമടിച്ചു എന്നു ചിലപ്പതികാരത്തിൽ പറഞ്ഞിരിക്കുന്ന ഇ് കേരളത്തിലെ പെരിയാറാകാൻ ഇടയുണ്ടു്. എന്നാൽ തമിഴുപ ണ്ഡിതന്മാർ അതു സമ്മതിക്കുന്നതല്ല. അതു വടക്കുള്ള ഒരു ചെറിയ നദി വലുതാക്കി വണ്ണിച്ചിരിക്കയാണെന്നാണു് അവരുടെ വ്യാഖ്യാനം. ചൊകുട്ടവൻ വഞ്ചിക്കുരുവുരുനിന്നും സ്വന്തരാജ്യത്തിലുകപ്പെട്ട പെരി യാററിൻ തീരത്ത് പ്രകൃതിശോഭ സംവീക്ഷിക്കുവാൻ മഹാരാജ്ഞിയു മൊരുമിച്ചു ചെന്നെത്തി എന്നു പറയുന്നതിൽ എന്താണു് യുക്തിഭംഗ മുള്ള തു് എന്നറിയുന്നില്ല. ഇളംകോ അടികളുടെ വണ്ണനത്തിലും മനോ ധമ്മനിമ്മിതക്കുളായ അവസ്ഥാവിശേഷങ്ങ്ക് വരാൻ മേലെന്നില്ലല്ലോ.

പെരിയാര് അന്നും ഇന്നും കടലിലേയ്ക്ക പ്രവഹിച്ചുകൊണ്ടിരിക്കുന്നു. പതനസ്ഥലത്തുള്ള കൊടുക്കുല്ലുരും തിരുവഞ്ചിക്കുളവും അന്തമുണ്ടായി രിക്കണം. പ്ലിനി, ടാളമി മുതലായ കപ്പൽ സഞ്ചാരികഠം അതിന വേണ്ട തെളിവു നൽകുന്നുണ്ട്. എന്നാൽ ചിലപ്പതികാരത്തിൽ വർ ണ്ണിച്ചിരികുന്നതുപോലെയുള്ള ഉദ്വാനങ്ങളും, വിശിഷ്യ സ്നാനഘട്ടങ്ങ ളം മററും അവിടെ അന്നുണ്ടായിരുന്നോ എന്നൂ സംശയിക്കേണ്ടിയിരി ഉപ്പുവെള്ളത്തിൽ ജലക്രീഡയ്യൂം എത്രമാത്രം പ്രസക്തിയു **ണ്ടെന്നു** വായനക്കാർ ചിന്തിക്കട്ടെ. നഭിയിലെ കടവുക്ക (സ്റ്റാനഘ ട്ടങ്ങരം) പ്രത്യേകം വർണ്ണിച്ചിരിക്കുന്ന സ്ഥിതിയ്ക്കു് വിഷയം മാററി മന സ്സിലാക്കേണ്ട ആവശ്വമിപ്പപ്പോ. തുമ്പമാലയുടെ കായ്യാ പോകട്ടെ. മിക്ക യൂദ്യവീരന്മാരും അണിഞ്ഞിരുന്ന 'വഞ്ചിമാല' ഉണ്ടാക്കുവാൻ തിരുവഞ്ചിക്കുളത്ത സാധിക്കുമോ? ആറുവഞ്ചിയോ, അശോകമോ, വള്ളിച്ഛരലോ (വഞ്ചുളം) എന്താണു് ഈ വഞ്ചി എന്നു വിശദമാക ന്നില്ല. അശോകമാണെങ്കിൽ തിരുവഞ്ചിക്കുളത്തു ധാരാളം കാണാവു ന്നതാണു്. 'തിരുവഞ്ചിക്കളം' എന്ന പേരുകൊണ്ടു് ഓരോ വിമശ്ക ന്മാർ കാണിച്ചിട്ടുള്ള ഇന്ദ്രജാലപാടവം ഞാനിവിടെ വിസ്തരിക്കുന്നില്ല. ആകെക്കൂടി നോക്കിയാൽ ക്രിസ്താബ്ദം രണ്ടാംന്തുററാണ്ടിൽ തിരുവഞ്ചി ക്കുളം ഒരു രാജധാനി ആയിരുന്നുവോ എന്നിനിയും തീച്ച്വറയാറായി වුහි.

ഭാശകന്വകമാരുടെ ആട്ടവും പാട്ടം ഉണ്ടായതുപോലെതന്നെ വേടകന്വകമാരുടെ ആട്ടവും പാട്ടം ചെംകട്ടവൻെറ രാജ്യത്തു കേരം ക്കാമായിരുന്നു എന്നു കവി വർണ്ണിച്ചിട്ടുള്ളത് അദ്രേഹം (രാജാവു്) കട ലിൻേറയും പർവതത്തിൻേറയും അധിപനായിരുന്നു എന്നു കാണിക്കു വാൻ മാത്രമാണ്. അതായത് പർവതപ്രദേശങ്ങരം മുതൽ കടൽ ത്തീരംവരെ ജനങ്ങരം ആ ശുഭാവസരത്തിൽ (ചെംകട്ടവൻെറ ജൈത്ര യാത്രാവസാനത്തിൽ) ആഹ്ലാഭഭരിതരായി വത്തിച്ചു എന്നേ അതിന ത്ഥമുള്ള. ഭാശകന്വകമാരുടെ പ്രസ്താവം ഉള്ള തുകൊണ്ടു രാജധാനി കടൽക്കരെ ആയിരുന്നു എന്നുഹിക്കാവുന്നതല്ല.

ആയ്യസംസ്താരം കേരളത്തിൽ പ്രചരിച്ചു് നാട്ടുകാർ മലയാ ളികളായിത്തീരുന്നതിനുമുമ്പുള്ള ഒരു കാലഘട്ടത്തിലെ സ്ഥിതിഗതികഠം യഥാത്ഥം ഗ്രഹിക്കുവാൻ സംഘം കൃതിക്ക നമ്മെ സഹായിക്കുന്നില്ലെ നമ്പൂരിമാരെപ്പററി ഒരക്ഷരം ന്നത്രേ ഇതുകൊണ്ടു വന്നുകൂടുന്നതു്. പോലും ഈ കൃതികളിൽ കാണുന്നില്ല. ആയ്യസംസ്ലാരസൂചകങ്ങളായ സംഗതികഠം അവിടവിടെ കാണാന്രണ്ടെങ്കിലും കേരളത്തിൽ അവ അ ത്രയ്ക്കേ ഉള്ളല്ലോ എന്നു നാം അദ്ഭരപ്പെടേണ്ടിയിരിക്കുന്നു. നിന്നും മനസ്സിലാക്കേണ്ടത്ര്, കേരളമല്ല, അതിനു പുറമേ സ്ഥിതിചെ യ്തിരുന്ന ഒരു മലനാടാണു് തമിഴുകവികളുടെ മനോധമ്മത്തിനു വിഷ യീഭവിച്ചിരിക്കുന്നതെന്നാണു്. അഥവാ കേരളംതന്നെയാണെങ്കിൽ വിദേശീയരായ ഈ കവികഠം ഭീമമായ അജ്ഞത വെളിപ്പെടുത്തിയിരി ഇപ്പോഗം ഈ പാട്ടുകഗം ക്കേരളചരിത്രസംബന്ധമായ പ്രാധാന്വം കല്പിക്കുന്ന സ്ഥിതിയ്ക്ക് അവയെപ്പററി മലയാളികഠം ഉദാ സീനരായിരുന്നാൽ ശ്രീമാൻ കെ. ജി. ശേഷയ്യരുടെ 'ഫേരരാജാക്ക ന്മാർ"പോംലയുള്ള ഗ്രന്ഥങ്ങൾ സപ്രമാണങ്ങളായിത്തിരും. രും മലയാളികളും ആഭികാലത്ത് ഒരേ വഗ്ഗക്കാരായിരുന്നു എന്നു സകാ രണം തെളിയിക്കുന്ന പക്ഷം അതു സചീകരിക്കുവാൻ ഞാനായിരി**ക്കും ന**്നൊമൻ എന്നു മാത്രമേ തൽക്കാലം പറയേണ്ടതായിട്ടുള്ള .

നവയുഗം

By K. N. GOPALA PILLAI, M.A., MADURA.

പരിഷ്ക്കാരം ഒരു പരിവത്തനമല്ല, പ്രത്യുത ഒരു ഭ്രമണം മാത്ര മാണും. ഈ വസ്തുത പ്രാക്തനകാലം മുതലുള്ള ലോകചരിത്രം നമ്മെ സുഖകാംക്ഷിയായ മനപ്പ്വൻ തന്റെറ ബുദ്ധിവൈ പഠിപ്പിക്കുന്നു. ഭവം ഉപയോഗിച്ച് സ്രഷ്ലിച്ച ഉപാധികളിൽ ഏററവും ത്രേഷ്യമായുള്ള ത് അഭിപ്രായവിനിമയത്തിനുള്ള ഭാഷയത്രേ. ഈ ഭാഷയ്ക്ക് അന ക്രമമായ പുരോഗതി ഉണ്ടായി. എന്നാൽ കേവലം അഭിപ്രായങ്ങഗം മറുള്ള വരെ ധരിപ്പിക്കുന്നതിനു മാത്രമല്ല, ചമൽക്കാരജനകമായ വാ കൃത്താൽ മനസ്സിനു് ഉല്ലാസം നൽകുന്നതിനും ഭാഷ ഉപകരിക്കുമെന്നു മനുഷ്യൻ മനസ്സിലാക്കി. തൽഫലമായി സാഹിത്വം ഉണ്ടായി. സാഹിത്വം സംസാരസമുദ്രത്തിൽ കിടന്നു വലയുന്ന മനുഷ്യന്റെ എടയ പേടന തീക്കുന്നതിനെന്നുമാത്രമല്ല, അവനിൽ സന്മാഗ്ഗപ്രസക്തി ജനി പ്പിക്കുന്നതിനം ഉതകുമെന്നു തൽപ്രണേതാക്ക്ഡം ധരിച്ചിരുന്നു. __ പുരാതനങ്ങളായ വേദഗ്രന്ഥങ്ങളിൽപോലും സഭാചാരപ്രതിപാദകങ്ങ ളായ ഭാഗങ്ങഠം കാണുന്നതിനുള്ള കാരണം ഇതല്ലേ? ഋഗ്വേദസംഹി തയിൽ ഒരു ചൂതുകളിക്കാരൻെറ വിലാപം എത്രയും രസകരമായിരി ക്കുന്നു:----

> *അന്വേ ജായാം പരിമൃശന്ത്വസ്വ യസ്വാഗ്രധഭേചഭനേ വാജ്വടക്ഷം ! പിതാ മാതാ ഭ്രാതര ഏനമാഹൂർ ന ജാനീമോ നയതാ ബദ്ധമേതം !! യഭാഭില്യേ ന ഭവിഷാണ്വേഭിഃ ചരായമ് ഭ്യോടവ ഹീയേ സഖിദ്വഃ !

^{*} ആരുടെ ധനത്തെയാണോ ചൂതു് കൈവശപ്പെടുത്തിയതു് അവന്റെ പത്നിയെ അന്യാന്മാർ ആലിംഗനം ചെയ്യുന്നു. ''ഞങ്ങ& അവനെ അറിയുകയില്ല; അവനെ ബന്ധിച്ചുകൊണ്ടുപോക'' എന്നു പിതാവും, മാതാവും, സഹോദരൻ എന്നിവർ

ന്യുത്പാശ്ച ബഭ്രവോ വാചമക്രതം ഏമീടേഷാം നിഷ്യതം ജാരിണീവ॥.

ഇവിടെ കവിയുടെ ഉദ്ദേശ്വം സഭാചാരോപദേശമാണെന്നുള്ള തു് സ്പയ്യമായിരിക്കുന്നു. മഴക്കാലം വരുന്നുവെന്ന് മുന്നറിവു തരുന്നവയും കൂട്ടം കൂട്ടമായി വന്ന് സംഘത്തലവൻറെ ശബ്ദത്തെ പിൻതുടരുന്നവ യുമായ മണ്യൂകങ്ങളെ, വേദോച്ചാരണം നടത്തുന്ന ബ്രാഹ്മണരോടുപ മിച്ചതു് എത്രയും സമഞ്ജസമായിരിക്കുന്നു! ഇന്നു ക്ഷേത്രത്തിനുള്ളിലും വരിസരങ്ങളിലും ഇരുന്ന് സംഗീതരസം അശേഷമില്ലാതെയും അത്ഥം ഗ്രഹിക്കാതെയും വേദം ചൊല്ലുന്ന മഹാനാരെ ന്യൂരിക്കുന്ന ഈ വണ്ണന സാവ്വകാലികമായ "ജീവൽസാഹിത്വ"മായി കരുതുന്നതിൽ തെററില്ല. ലോകോല്പത്തിയെപ്പററി വേദകര്താക്കാം കണ്ട വസ്തുത തന്നെയാണു് വലരും കവിതാരൂപത്തിൽ വീണ്ടും എഴുതി വരുന്നതു്. കാളിഭാസൻ ശകന്തളാപരിത്വാഗത്തിലും, അഗ്നിമിത്രൻറെ കാമപാരവശ്വത്തിലും അന്നത്തെ രാജാക്കന്മാരുടെ ഉമരുംഖലത്വമല്ലേ പ്രതിപാദിച്ചിരിക്കുന്നതു്?

ആ പരിതോഷാഭചിടുഷാം ന സാധുമന്വേ പ്രയോഗവിജ്ഞാനം

എന്നു തുടങ്ങി തനിക്കു സിദ്ധിച്ചുവന്ന പ്രോത്സാഹനവും തൻറെ ശുഭാ പൂിവിശ്ചാസവും വെളിവാക്കിയ ആ മഹാകവിയുടെ ചിന്താഗതി ഇന്നു നാം വള്ള ത്തോരം തുടങ്ങിയുള്ള വരിൽ കാണുന്നുവെങ്കിൽ, "എന്തെഴു തിയാലെന്ത്ര് ? ജനങ്ങരം എല്ലാററിനേയും പഴിക്കുന്നാവരാണും". അഗ്നി പരിശുദ്ധയായ സീതയെപ്പോലും അവർ കുററപ്പെടുത്തിയില്ലേ?"— എന്നിങ്ങനെ ഭവഭ്രതിയിൽ കണ്ടിരുന്ന ശോകമമായയും നരജീവിതം വേദനയായി കരുതിയ കുമാരനാശാനിലും മറും കാണുന്നുണ്ടു്. വിടുര ഗൃഹത്തിൽനിന്നു് ത്രീകൃഷ്ണനെ ഭക്ഷണം കഴിപ്പിക്കയും ഏകലവൃതന അസ്രുവിഭ്യാപാരംഗതനാക്കുകയും ചെയ്തു മറ്റാഭാരതകത്താവും 'വേട

പറയുന്നം. "ഞാൻ ഇനി പോകയില്ല; എന്റെ സ്റ്റേഹിതന്മാർ എന്നെ ഉപേ ക്ഷിക്കുന്നാ" എന്നു വിചാരിക്കവേ ചുതിന്റെ ശബ്ബംകേട്ട് അഭിസാരിക സങ്കേതസ്ഥ ലത്തേയ്യെന്നുപോലെ ഞാൻ പോകനം.

ക്കിഴവികൾ' ബലപ്പെട്ട് 'വഴിയൊഴിവതുകണ്ട്' വേണ്ടയെന്നു കഥാ നായകനെക്കൊണ്ട് അരുളിച്ചെയ്യിച്ച കേശവീയകത്താവും 'ദുരവസ്ഥ' നിമ്മിച്ച ആശാനം വേദശാസ്ത്രപുരാണാദികൾ 'മേൽജാതിതൻപൈ തുക'മല്ലെന്ന് പറഞ്ഞുപോയ വള്ള ത്തോളം അധഃകൃതോഭധാരണവി ഷയത്തിൽ വിഭിന്നമായ ആദശമുള്ള വരായിരുന്നുവെന്ന് കരുതാൻ തര മില്ല.

ശബ്ദാകൊണ്ടു കവിത മോടിപിടിക്കുന്ന സമ്പ്രദായാ ഒരുകാ ലത്തെന്നല്ല ഏത്രകാലത്തും ചിലക്ക് സന്തോഷകരമായി തോന്നാം. ഇംഗ്ലീഷ്, സംസ്തതം തുടങ്ങിയുള്ള ഭാഷകഠം ഇതിൽനിന്നും തീരെ വ്യത്യ സ്തങ്ങളാണെന്ന് പറവാനും നിവ്വത്തിയില്ല. ദ്രാവിഡഭാഷകഠം പൊതു വെയും വിശേഷിച്ചു് തമിഴും ശബ്ദാഡംബരത്തിൽ അല്പം കൂടുതലായി ഭ്രമിച്ചു. അച്ചടി നടപ്പില്ലായ്ക്കയാൽ പമൃങ്ങഗം ചൊല്ലിപ്പറിക്കേണ്ടിയി രുന്ന കാലത്ത് ശബ്ദാലങ്കാരം ആവശ്വമായിരുന്നിരിക്കാം. എന്നാൽ ശബ്ദത്തിനുവേണ്ടി അത്ഥം ബലികഴിക്കരുതെന്നുള്ള തത്തചം പ്രാക്തന കാലം മുതല്ലെം കവികഠം സുരിച്ചിരുന്നു. വാല്പീകി തുടങ്ങിയുള്ള ആഷ് കവികഠം ശബ്ദാഡംബരത്തിൽ ഭ്രമിച്ചിരുന്നില്ല. ചില റെറശ്ലോക ങ്ങളിലും ഖണ്ഡകൃതികളിലും ശബ്ദാലങ്കാരം പ്രയോഗിച്ച കാളിഭാസൻ പ്രൌഢകൃതികളിൽ ഐദംപയ്യേണ അത്ഥഗാംഭീയ്യത്തെയാണു് അവ ലംബിച്ചിട്ടുള്ളത്. സരളപടപ്രയോഗംകൊണ്ട് മധുരമധുരമായ മാഘ കാവ്വത്തിൽ ശബ്ദംകൊണ്ടുള്ള ഇന്ദ്രജാലവിദ്വ കവി ചിത്രസഗ്ഗത്തി ലേയ്ക്കു മാററിവച്ചിരിക്കുന്നതും ത്രദ്ധേയമാണു്. ത്രിഹഷനെപ്പോലെ യുള്ള ഒരു കവിന്ദ്രനപോലും 'രരാജ നീരാജനയാ സരാജഘം' എന്നി ത്വാദി ഭാഗങ്ങളിൽ പ്രാസഭ്രമം മൂലം അബലം പററിയതോക്ഷ്മ്പോരം സാധാരണക്കാരുടെ കഥ പറവാനമില്ല. നീലകണ്ഠദീക്ഷിതർ : —

> ഭിഷ്ട്വൗധിത്രഢാം കവിതാധിരാജ്യം ധീരോ രമന്തേ നഹി ശബ്ദചിത്രേ | സചഗ്ഗേപി ഗതചാപ്സരസാം ഗണോയം കാണൈവ കിം കാപി ഗവേഷണീയാ ||

എന്ത് ശബ്ദളമക്കാരെ പരിഹസിച്ചുവെങ്കിൽ മിൽട്ടൺ 'Paradise Lost' എന്ന കൃതിയുടെ മുഖവുരയിലും ഷേക്സപ്പിയർ Henry IV നാടക ത്തിലും ഭംഗൃന്തരേണ ഇതേ ആശയംതന്നെ പ്രകടിപ്പിച്ചിരിക്കുന്നു! സാഹിത്വത്തിൽ വാപ്പ്ം ഉടച്ചുവാപ്പ്ം മുറയ്ക്കു നടന്നുകൊണ്ടിരിക്കുന്നു.

അതിനാൽ:---

'യദായദാഹി ധമ്മസ്വ ഗ്ലാനിർഭവതി ഭാരത! അഭ്വൃത്ഥാനമധമ്മസ്വ തദാത്മാനം സ്തജാമ്വഹം.'

എന്ന മട്ടിൽ ഓരോ കാലത്ത് സാഹിത്വമമ്മജ്ഞന്മാർ അവതരിച്ചു ഭാഷാഭിവ്വഭ്ധിയെ ലാക്കാക്കി അവർ സചാഭിപ്രായ കൊണ്ടുമിരിക്കും. **ങ്ങ**ഠം സധൈയ്യാ പുറത്തുപറയും. കൈരളിയുടെ ശബ്ദാ**ഡ**ംബരഭ്രമ ത്തെപ്പററിയുള്ള ഉപാലംഭം അടുത്ത കാലത്ത് ഭചിതീയാക്ഷരപ്രാസ വാടമായി കലാശിച്ചു തും ഇവിടെ സ്മരണീയമാണും. ഈ വാദത്തിൽ ന്തിന്നും നമുക്ക് ന്തതനസാമഗ്രികഠം അധികമായി സിദ്ധിച്ചില്ല. ന്നാൽ നമുക്ക് അജ്ഞാതമായിക്കിടന്നിരുന്ന പല തത്ത്വങ്ങളും പുറത്ത ഭചിതീയാക്ഷരപ്രാസം സചരവൃഞ്ജനൈകരൂപ്വത്തോടുകൂടി പ്രയോഗിച്ച് കവിത നിമ്മിച്ചവരിൽ പലരും നിരത്ഥപദങ്ങരം 'കുത്തി ത്തിരുകി'യതിൽ പശ്ചാത്തപിച്ചു. രമണീയമായ അത്ഥഭാനത്താൽ ആനന്ദം നൽകുന്ന വാണിയെ ആത്രയിച്ച 'കേശവകവി' കാവ്വസര ണിയിൽ വന്നുകൂടിട്ടുള്ള അന്ധകാരത്തെ നീക്കുന്നതിന് ത്രീകാളിഭാ സൻറെ കാൽനഖേന്ദ്യമരിചികളെയത്രേ ശരണം പ്രാപിക്കുന്നതു്. കേശവീയത്തിനെറ പ്രാടുർഭാവം ഭാഷാകവിതാപ്രസ്ഥാനത്തിൽ വലു തായ ഒരു പരിവത്തനം ഉളവാക്കി. എന്തു കാരണത്താലോ കവികഠം മഹാകാവ്വപ്രസ്ഥാനത്തിൽ കൈവച്ചു കാണുന്നില്ല. ഖണ്ഡകാവ്വ ജ്ജാം വീണ്ടും മുന്നണിയിലെത്തി. ബുദ്ധിമാന്മാരായ കവികാം പ്രാസ ള്മാ നിശ്ശേഷം കൈവെടിഞ്ഞു. ഇങ്ങനെ നോക്കുമ്പോ**ം** നവയുഗം എന്നൊന്നുണ്ടോ? ഓരോ കാലത്തും ജീവിച്ചിരിക്കുന്നവക്ക് തങ്ങളുടെ കാലം ഒരു നവയുഗമായിത്തോന്നാം. കാലയവനികയ്യൂ_ളുള്ളിൽ മറഞ്ഞു കിടന്നിരുന്ന പ്രസ്ഥാനങ്ങൾ കാർമേഘശകലങ്ങൾ ചിതറിക്കിടക്കുന്ന ആകാശത്തിലെ ചന്ദ്രനെന്നപോലെ കൂടെ ക്രൂടെ തെളിഞ്ഞുവരിക പതിവാണ്. അവയ്ക്ക് പതിയപേരുകൾ കല്പിക്കുന്നത് സൂക്ഷിച്ചു വേണ്ടിയിരിക്കുന്നു.

എന്നാൽ 'നവയുഗം' എന്ന സംജ്ഞ കേവലം അത്ഥതുന്യ ഇപ്പോഠം ലോകത്തിൻെറ **ഏതൊരു** ഭാഗവും വിവിധഭാഷാ സാഹിത്വങ്ങളുടെ ഒരു സമ്മേളനഭ്രമിയായിത്തീന്നിട്ടുണ്ട്. വിദ്ദരദേശ മായ ഇംഗ്ലണ്ടിലെ സാഹിത്വത്തിന്റെ പുരോഗതി നമ്മെയും സാര മായി ബാധിച്ചു. തൽഫലമായി നോവൽ, ചെറുകഥ, ഉപന്വാസ ങ്ങ**ഠം**, സംഭാഷണങ്ങഠം, ലേഖനങ്ങഠം എന്നിങ്ങനെ പല പുതിയ പ്രസ്ഥാനങ്ങൾ മലയാളഭാഷയിൽ ജനിച്ചുവളന്ത. ചാക്വാർകുത്ത്, കഥകളി, കല്യാണക്കളി, തിരുവാതിരക്കളി മുതലായവയിൽ കടികൊ ണ്ടിരുന്ന ദൃശ്വകലയുടെ ത്രദ്ധ നാടകത്തിൽ പതിഞ്ഞു. കൃഷ്ണഗാഥ, രാമായണം, ചന്ദ്രോത്സവം തുടങ്ങിയുള്ള കൃതികളിൽ നൃത്തമാടിക്കളി ച്ചിരുന്ന വൈദർഭി കുറേക്കാലം കാടുകയറീട്ട് കൈരളിയെ വീണ്ടും ആലിംഗനാംചെയ്തു. അവളുടെ ആശയഗാംഭിയ്ക്കാം പൂവ്വാധികം വദ്ധിച്ചു. പ്രകൃതിയം മന്തഷ്യന്തം തമ്മിലുള്ള അഭേഭ്യേബന്ധം പ്രതിപാദിച്ച് പൂവിലും മഴവില്ലിലും പലാശത്തിലും പല വിശിഷ്ടതത്തചങ്ങരം മശി ക്കാൻ കവികഠം വീണ്ടം പഠിച്ചു. കൈരളി ആനന്ദലഹരിയിൽ മുഴകി ഗ്രഢാത്ഥകവനവും ആരംഭിച്ചു. മനസ്സ് ഭൌതികലോകത്തിൽ നിന്നുയന്ന് ഈശചരശക്തിയെ ആലിംഗനംചെയ്യുമ്പോഗം ഉണ്ടാകുന്ന **രെ** പ്രത്യേകാനഭവത്തെ പ്രതിപാദിക്കുന്ന ഒന്നത്രേ ഗ്ര**ഡാത്ഥ**കവിത. സാധാരണ കവികാക്ക് അതിലേയ്ക്കുള്ള പ്രവേശനം അസാഭ്വ്വമല്ലെ ങ്കിലും കൃശ്ശമാണു്. പലരും അതിൽ പ്രവേശിച്ചു് കാൽവഴുതി വീഴ ന്നുണ്ട്. എന്നാൽ ചുരുക്കം ചിലക്ക് വിജയവും സിജ്ഥിക്കുന്നു. പ്രഭാതുല്വമായ ഈ ആയസ്സിൽ ലോകമാകുന്ന ഗ്രന്ഥത്തിന്റെ ഏതാ നം വരികാം വായിക്കാൻ അഭ്വസിക്കുന്നതിനു മുമ്പു് സ്രഷ്ട്രികത്താവു് നമ്മെ അഞ്ജോട്ടുവിളിക്കുന്നു!! അതിനിടയിൽ ആ ജഗന്നിയന്താവിൻെറ മ ഹതചം അണ്വെങ്കിലും അനാഭവപ്പെട്ട ഭാഗ്വവാന്മാർ ഏതുകാലത്തും പൂജ്വരേത്ര. അനുഭിനം തനിക്കുണ്ടായ ഈ ശ്വരസാക്ഷാൽക്കാരാനി മിത്തം സ്റ്റേഹഗാനങ്ങൾ പാടി ലോകത്തെ ആനന്ദസാഗരത്തിൽ ആറാ ടിച്ച ശ്രീ രവീന്ദ്രനാഥ ടാഗോറിനെപ്പോലുള്ള കവിവയ്യന്മാർ കേരള ത്തിലും ഉണ്ടാകട്ടെ; അവർ കേരളത്തിന്റെയെന്നല്ല ഭാരതഭ്രവിന്റെറ അന്തസ്സാരം നിതരാം വെളിവാക്കട്ടെ; ദേശീയബോധം, തൊഴിലിന്റെറ മാന്വത, പരിശ്രമശീലം, പരോപകാരം മുതലായ ഇണങ്ങൾ അവ കേടെ കൃതികളിൽ നിരക്ഷീരന്വായേന കലന്തകാണട്ടെ; സമതചം സാ ഹോദയ്യം എന്നിവ ജനസമ്യദായത്തിന്റെ ഫ്ലാദയത്തിൽ രൂഢമൂലകമാ കത്തക്കവണ്ണമുള്ള സജീവചിത്രങ്ങൾ അവർ നിമ്മിക്കട്ടെ; അക്കാലം നമുക്ക് ഒരു നവയുഗമായി കരുതാം.

ജാതിചിന്ത, തങ്ങളുടെ പ്രത്യേകസാഹചയ്യിങ്ങാം, പാഠപസ്ത കക്കമ്മിററികളിലെ അംഗങ്ങളുടെ ഇഷ്ടാനിഷ്പങ്ങഠം എന്നിവ വിസ്ത രിച്ച് ഗ്രന്ഥങ്ങരംക്ക് നിഷ്പക്ഷനിലയിൽ നിരുപണങ്ങളെഴതാൻ ഭാഷാ ഭിമാനികഠംക്ക് സന്മനസ്സണ്ടാകട്ടെ; ജീവിതസ്മരണകള*ം* ജീവചരിത്ര ങ്ങളും എഴുതുന്ന മഹാന്മാർ സ്വന്തം പരാക്രമങ്ങഗം പവ്വതാകൃതിയിൽ വണ്ണിച്ച് ഗ്രന്ഥം വിപുലമാക്കാതെ കഥാനായകൻെറ ജീവിതഗതി യിലുള്ള സംഭവങ്ങഠം അനൃക്ക് എത്രത്തോളം പ്രയോജനപ്പെടുമെന്ന് ശാന്തമായി ചിന്തിച്ചതിനശേഷം ഗ്രന്ഥമെഴതട്ടെ; കവി ഒരു ത ത്തോപദേഷ്ഠാവല്ലെങ്കിലും അയാളുടെ പരമോദ്ദേശ്വം ജനക്ഷേമം മാത്ര മാണെന്ന് ഏവരും സമ്മതിക്കും. ഈ തത്തചം സ്മരിച്ച് സഭാചാര ത്തിനു വൈകല്വം വരുത്തുന്ന ഗ്രന്ഥങ്ങഗം കവികളാരുംതന്നെ എഴുതാ തിരിക്കട്ടെ; അതുപോലെതന്നെ സ്വാത്ഥതല്പരമായ ചില ചരിത്ര കാരന്മാർ എഴുതിവെച്ചിട്ടുള്ള ചരിത്രരേഖകഠം കണ്ണമടച്ചു വിശചസി ച്ചുകൊണ്ടു് ആരും കാവ്യങ്ങഠം നിമ്മിക്കാതിരിക്കട്ടെ; സവ്വോപരി ലോ കത്തിൽ ശാന്തി വ<u>ളത്ത</u>ന്നതിനു പയ്യാപ്ലമായ സാഹിത്വ**ക്ട**തിക**ം അ**നു ഭിനം ഉണ്ടാകട്ടെ; അക്കാലം ഒരു നവയുഗമായി നമുക്കു് കരുതാം.

യീ ഭഗവദ്ഗീത

By T. K. KRISHNA MENON, B.A., ERNAKULAM.

ഓം നമോ ഭഗവതേ വാസുദേവായ

"ബ്രഹ്മാനന്ദാ പരമസുകൃതാ കേവലാ ജ്ഞാനമുത്തിാ വിശ്ചാതീതാ ഗഗനസദ്ദശാ തത്വമസ്വാഭിലക്ഷ്വാം ഏകാ നിത്വാ വിമലമചലാ സവ്വധീ സാക്ഷിഭ്രതാ ഭാവാതീതാ തിഗുണരഹിതാ സൽഗുരും തചാ നമാമീം."

ഈശ്വരനണ്ടു്. ആ ജഗദിശ്വരനെ ഓരോരുത്തർ, അവര വരുടെ ഹിതമനസരിച്ചു്, പരമാത്മാവു്, പരബ്രഹ്മം, ആഭികാരണം, പരമപ്പുരുപ്പൻ, സൽഗ്രരു എന്നിങ്ങിനെ ഏതെങ്കിലും ഒരു പേരു വിളിച്ചു വരുന്നു. പരമാത്മാവു് ഏകനും നിത്വനമാണു്. നവീനശാസ്ത്ര പ്രകാരം വസ്തുവും ശക്തിയും ഏതുപ്രകാരമോ, ഏകദേശം അതുപ്രകാ രം, പരമാത്മാവു് പരാ പരാ എന്ന ഉശപ്പിരിവോടുകൂടിയ മായ, അ ല്ലെങ്കിൽ മൂലപ്രകൃതിയുമായി ബന്ധപ്പെട്ടിരിക്കുന്നു. പരമാത്മാവിൽ ഈ സ്വഭാവം നിത്വമായി ലീനമായിട്ടുള്ള താകുന്നു. പരാ പ്രകൃതിയോടു കൂടിയ പരമാത്മാവാണു് ജീവൻ. അമേയവും നിത്വവുമായ ആകാ ശവും കുടത്തിലെ ആകാശവും എങ്ങനെയോ, ഏകദേശം അതുമാതിരി യാണു് പരമാത്മാവും ജീവാത്മാവുമായുള്ള ബന്ധമെന്ന് വ്വവഹരി ക്കാം. പരാ, അപരാപ്രകൃതികളോടുകൂടിയ പരമാത്മാവാണു് പ്രത്യ ക്ഷഭാവത്തിൽ പ്രപഞ്ചമായി പ്രകാശിക്കുന്നതു്. പ്രപഞ്ചം അനിത്വം

> "ബ്രഹ്മം സത്വം ജഗച്ചിഥ്വാ ജീവോ ബ്രഹ്മൈവനാപരാ."

സ്വമായകൊണ്ട് പരമാത്മാവിനു ദേഹവാനായിതീരാം; സ്വഷ്ടിസ്ഥി തിസംഹാരങ്ങളെയും, ഏപ്പെടുത്താം. പിണ്ഡശരീരത്തോടും ഭവനുഭാ വത്തോടും ജീവാത്മാവിൻെറ ഈ ലോകത്തിലുള്ള യാത്രാനിവ്വഹണം തന്നെ സംസാരം. നാളതുവരെ ആർജ്ജിച്ച, പൂവ്വക്തയമ്മാധമ്മ ങ്ങളെ ആശ്രയിച്ച സംസ്താരവിശേഷത്തോടുകൂടിയിരിക്കും മനുഷ്യൻറെ കമ്മങ്ങരം. അതിനാലാണു് ജീവപ്രകൃതി, വാസന, ത്രിഗുണാത്മിക യായി, അതായത് സത്പരജസ്തമോമയമായി ഇരിക്കുന്നത്ര്. ത്രിഗുണ ത്രപമായയാൽ ജീവാത്മാപരമാത്മാക്കരംകൂടി മുടപ്പെട്ടിരിക്കുന്ന എന്നു പറയുന്നതിൽ വലിയ തെററില്ല. ഏറെക്കുറെ നമ്മുടെ പൂവ്വസൂരിക ഉടെ മതമിതാണു്. പാശ്ചാത്വദേശങ്ങളിലെ നവീനശാസ്ത്രലോകവും സംശയം കൂടാതെ ഒന്നു സമ്മതിക്കുന്നും. അതായതു്, ഈ ലോക ത്തിൽ കാണുന്ന ദ്രവ്യങ്ങളും ഇവയുടെ ശക്തിയും കൊണ്ടല്ല ആഭ്വം ലോകമുണ്ടായത്ര്; പരമാണുക്കളിൽ അന്ത്രഭവിച്ചുകിടക്കുന്ന ശക്തികൊ ണൂമല്ല; ഇവക്കെല്ലാററിനും ഹേതുവായി അജ്ഞാതവും അവ്വക്തവു മായി ഒരു ശക്തിയുണ്ടു് എന്നു്. ഈ ശക്തിയെയാണു് നമ്മുടെ സിദ്ധ ന്മാർ ബ്രഹ്മമെന്നും പരമാത്മാവ് എന്നും മറവം വ്വവഹരിച്ചു വരുന്നത്ര്.

ജീവാത്മാവ്, ജഗത്ത്, പരമാത്മാവ് എന്നിവയുടെ സതഭാവ ത്തിനം ഘടനയ്ക്കും ഉള്ള പ്രമാണമെന്ത്? പ്രത്യക്ഷാനഭവവും അന മാനവും തരമില്ലെങ്കിൽ പിന്നെ ശരണമെന്ത്? ആപ്ലോപദേശമായ ശബ്ദം മാത്രമാണ് ഒടുവിൽ ശേഷിക്കുന്നത്ല്. യാതൊരു മുരുഭ്രശമി ല്ലാതെ സത്വാനേച്ഷണത്തിൽ ഏപ്പെട്ടിരുന്ന സ്വാനഭവത്തോടുകൂടിയ തത്വദശികഠം ലോകോപകാരത്തിനായി പറഞ്ഞിട്ടുള്ള വാക്കുകളെ എന്തുകൊണ്ടു വിശചസിച്ചുകൂടാ? അവർ നിസ്പ്ലാഹന്മാരും അപക്ഷ വാതികളംകൂടിയാകുന്നു.

ഉപനിഷഭ് മഹാവാകൃങ്ങ ഗ അങ്ങിനെയുള്ള പരമഹംസന്മാ ന്മാരുടെയാകുന്നം.

> "ഏകോ ദേവഃ സവ്വിഭ്രതേഷ്യത്രഢഃ സവ്വവ്വാപീ സവ്വിഭ്രതാന്തരാത്മാ."

എന്നാകുന്നു ഉപനിഷഭ്ത്സിഭധാന്തം. "ഉപദേക്ഷ്യന്തികേ ജ്ഞാനം ജ്ഞാനിനു സൃത്രദശിനു" അവരുടെ വാക്കുകളെ കണ്ണടച്ചു വിശചസി ക്കേണമെന്നാരും ആവശ്യപ്പെടുന്നില്ല. ഉത്തമനായ ആചായ്പ്പനിൽ നിന്ത്, വിനയാനചിതനായി സംശയങ്ങളറുപോകംവിധം, മുമുക്ഷു വായ ശിഷ്വൻ വേഭാന്തത്തെ അഭ്വസിക്കണം എന്നാണു് പറഞ്ഞിരി ക്കുന്നതു്.

> "തദ്വിഭായി പ്രണിപാതേന പരിപ്രശ്നേസേവയാ"

പിന്നെ ഏകാഗ്രചിത്തത്തോടുകൂടി മനനംചെയ്തു വേദാന്ത സാരത്തെ ഗ്രഹിക്കണം. "ശ്രോതവ്യോ, മന്തമോ, നിദിധ്വാസിതവ്യും", "യസ്തക്കിന്നാനുസംധന്തേ സധമ്മ വേദനേരത്തു" ഈ വിധമുള്ള അഭ്യാ സംകൊണ്ടാണ് ഭക്തൻ,

> "യോമാം പശ്വതിസവ്വത്ര സവ്വംചമയി പശ്വതി തസ്വാഹം ന പ്രണശ്വാമി സച്ചമേന പ്രണശ്വതി."

എന്നു ഭഗവൽഗിതയിൽ ഉപദേശിക്കുന്ന അവസ്ഥയെ പ്രാപിക്കുന്നത്ര്. താനും ബ്രഹ്മാവും തമ്മിൽ അഭേദബുദ്ധിയുണ്ടാകുന്നതുതന്നെ മോക്ഷം. മോക്ഷം കിട്ടിയാൽ പിന്നെ ഭവഭയവും വേണ്ടല്ലൊ. സവ്വകമ്മസന്ന്യാ സപൂവ്വകമായ ആത്മജ്ഞാനമൊന്നെ പരമാത്ഥപ്രാപ്പിക്കുതക്ര, എന്നു ഗീത തുറന്നു പറയുന്നു. അതോടുകൂടി അഹംഭാവം പോകം, ശമധന നാകം; ഇഷ്യാനിഷ്യങ്ങളും ഹഷ്വിഷാഭങ്ങളും നശിക്കും. ഭവന്ദഭാവം പോകമെന്നു സാരം.

ഇതാണ് ഗീതയുടെ ഒരു രത്നച്ചുരുക്കാ. വേദോപനിഷത്തു കളിലും പുരാണങ്ങളിലുമെല്ലാം ഈ വിഷയത്തെക്കുറിച്ചു പ്രതിപാദിച്ചു കാണം. എങ്കിലും ഗീതയിലെപോലെ, സംശയലേശം വയ്ക്കാതെ, കറ കളഞ്ഞമട്ടിൽ, അത്ര സുഗമമായി മറെറാരുദിക്കിലും ഈ വിഷയ ത്തെ അതിൻെറ നാനാമുഖങ്ങളെയും സ്വശിച്ചുകൊണ്ടു വിശദീകരിച്ചി ട്ടില്ലെന്നുവേണം പറയുവാൻ. ശിഷ്യൻ അള്ളുനൻ, ഇരു ത്രീകൃഷ്ണൻ, സന്ദദ്ദം ഭാരതയുധത്തിന്നടുത്തുമുമ്പും. പിന്നെ ഉപദേശവും രീതിയും പ്രഥമസ്ഥാനം വഹിക്കാതിരിക്കുന്നതെങ്ങനെ ? "ഇത്വഹം വാസുദേവസ്വ പാത്ഥസ്വച മഹാത്മനഃ സംവാദമിമമത്രൌഷ മത്ഭ്രതം രോമഹഷ്ണം." എന്നു സഞ്ജയൻ പറഞ്ഞതിൽ ആശ്ചയ്യപ്പെടുവാനില്ല. വേദാന്ത ദേശികാചായ്യരും വെറുതെയല്ല ഈവിധം ഗീതയെക്കുറിച്ചു ഘോഷി ച്ചിട്ടുള്ള ഇ്.

"ദുവ്വിജ്ഞേയെ നിഗമഗഹനൈ ദൂരവിത്രാന്തി ദേശൈ ബാലാനഹ്റെ ബ്ബഹൂഭിരയന്നെ ശോചതോനു സുപന്ഥാ നിഷ്പത്വുഹം നിജപദമസൌനേതുകാമു സചഭ്രമ്റാ സൽപാഥേയം കിമപിവിദധേ സാരഥിു സവ്വനേതാ."

സവ്വജനസമ്മതമായാരു സഭാചാരത്തെയാണ് ഗീതയിൽ പ്രതിപാ ഭിച്ചിട്ടുള്ളത്. സകലസനാഗ്ഗത്തിന്നും ഇതൊരാധാരമാണ്. ഭിന്ന മതക്കാക്ക് ഒരുപോലെ ഉപയോഗപ്പെട്ടന്നൊരു വഴിയാണ് ഇതിൽ വെട്ടിത്രുറന്നിരിക്കുന്നത്ര്. "അദ്ധ്വാത്തവിഷയമായി ഏതെല്ലാം പ്രസ്ഥാനങ്ങളുണ്ടോ, അവയിലെ എല്ലാം സാരാംശം അടങ്ങിയതാണീ ഗീത. ജാതിമതഭേദമെന്വേ, ഇതു സവ്വരാലും ആഭരണീയമാണ്". യോഗിക്കും ഭോഗിക്കും, പുണ്യവാന്നും പാപിക്കും, എന്നുവേണ്ട, സംസ്താ രത്തിന്റെ ഏതുനിലയിലിരിക്കുന്നവക്കും മേൽഗതിക്കും ഇതിൽ സുഗമ മായമാഗ്ഗം നിദ്ദേശിച്ചിട്ടുണ്ടു്. അതാണ് ഇതിന്നു മതഗ്രന്ഥങ്ങളിൽ ആരാല്യവും ഉന്നതവും ശാശചതവുമായൊരു സ്ഥാനത്തിനുള്ള കാരണം. എത്ര പരിഭാഷകളം എത്ര വ്യാഖ്യാനങ്ങളുമാണ് ഇതിന്നും മെത്ര് എന്നതിനും കണക്കില്ല.

ഗീതയിൽ പതിനെട്ടു അഭ്യായങ്ങളും എഴന്തുവശ്ലോകങ്ങളു മാണുള്ള ത്ര്. ഭാഷയും വിഷയവും രീതിയും നോക്കുന്നതായാൽ, ഷഡ് ഒശനസിദ്ധാന്തങ്ങാക്കും സ്ഥിരപ്രതിഷ്യ നിദ്ധിക്കുന്നതിനു മുമ്പൊരുകാ ലത്താണു് ഗീത ആവിഭവിച്ചിട്ടുള്ള തെന്നു കാണാം. ഗീതയെ ഒരു ഉപനിഷത്തായി നാമകരണം ചെയ്തിട്ടുള്ള തിൽ യാതൊരു അനൌചി തൃവുമില്ല.

ഗീത മഹാഭാരതത്തിലെ ഭീഷ്മവവ്വത്തിനെറ ഒരു ഭാഗമായിട്ടാ ണല്ലോ ഇരിക്കുന്നതു്. .! ഭാരതത്തിനെറ ശരിയായ ഒരു അംശമാണോ ഇത് ? അതോ, മുമ്പുണ്ടായിരുന്നതിനേയോ പിന്നീട്ട ഉണ്ടാക്കിയതി നെയൊ കൂട്ടിച്ചേത്തതോ? യുദ്ധത്തിനായി ഒരുങ്ങിനില്ലുന്ന ഇരുസേന കുളുടേയും മദ്ധ്വത്തിൽവെച്ച് ഇങ്ങനെയൊരു ഭാഷണം നടക്കുമോ? ഇത്രവേഗത്തിൽ ഇതെല്ലാം ഉപദേശിക്കുവാൻ സാധിക്കുമോ? എന്നീ പ്രശ്നങ്ങുറംക്കുള്ള തക്ക സമാധാനങ്ങളെ ഇവിടെ കൊടുക്കുവാൻ തുട ന്നാൽ ലേഖനം ഭീർഘിക്കും എന്നല്ലാതെ, അതുകൊണ്ടു വലുതായൊരു ഇണവും ഇതിനു സിദ്ധിക്കുവാൻ ഇല്ല. വേണമെന്നുള്ള വക്കു വേണ്ട

ഗീതയെ മൂന്നു ഷട് കങ്ങളായി വിഭജിച്ചിട്ടുള്ള തായി വിചാരി ഒന്നാമത്തേതിൽ, തതചമസിമഹാവാക്വത്തിലെ തചം പഭം, അഥവാ ബ്രഹ്മാഹമസ്മിയിലെ അഹം പദം വിസ്തരിക്കുന്നു. ങ്ങിയ ജീവാത്മാവിന്റെ പരമാത്ഥം വെളിപ്പെടുത്തി, അതിന്ന യഥാ തഥത്തിൽ കത്തവൃാകത്തവൃങ്ങഠം ഇല്ലെന്നും വരുത്തി, സവ്വകമ്മസ ന്വാസംതന്നെ അതിൻെറ ശരിയായ ധമ്മം എന്നും സൂചിപ്പിച്ചു. അ തിനെ സാക്ഷാൽകരിക്കവാനുള്ള വഴിയെക്കുറിച്ചും പറഞ്ഞു. ട്രെവിൽ ആത്മാവിൽ സ്ഥിതമായ ചിത്തവൃത്തികൊണ്ടു പരമാത്മാവിനെ ഭജി ക്കുകതന്നെ ഉത്തമമെന്നും വിധിച്ചു. തൽ, പരമാത്മാ, എന്നാലെന്ത് നിഗ്ഗണമായ സ**ചര്ര**പ**ത്തെ എന്നു ഭചിതീയ**ഷട് കത്തിൽ പറയുന്നു. വണ്ണിച്ചിട്ടുണ്ടെങ്കിലും, ഈ ഷട് കത്തിൽ അധികഭാഗത്തെയും സഹുണ ബ്രഹോപാസനയെക്കുറിച്ചു പറയുവാനാകുന്ന ഉപയോഗിച്ചിട്ടുള്ള ത്ര എന്നു കാണാം. ടെവിലത്തെ ഷട് കത്തിൽ, അസിപദത്തിന്റെ വ്വാ ച്ചാനമാണ് — തൽ (ബ്രഹ്മവും) തചാ (ജീവാത്മാവും) സതൃത്തിലൊ ന്നാണെന്ന സംഗതിയെപ്പററി പറയുന്നു. നെക്രടി സൂക്ഷിച്ചാ**ൽ**, രണ്ടാമദ്ധ്വായം പതിനൊന്നാംഗ്ലോകം മുതല്ലൂാണു് ഉപദേശം തുടങ്ങു തെന്നു കാണാം. അതുവരെ, അതിനുള്ള ഹേതു ഇന്നതെന്നു കാണി രണ്ടാമദ്ധ്വായം ഗീതയുടെ ഒരു സിദ്ധാന്തച്ചുരുക്കവും പതിനെട്ടാ മല്യായം ഗീതയുടെ ആകെയുള്ള ചുരുക്കവുമാകുന്നു എന്നു ഗണിക്കാം. പതിനഞ്ചുകൊണ്ടു അസിശബ്ദത്തിന്റെ അത്ഥം വിവരിച്ചുതീരും. പതിനാരം പതിനേഴം ചില പടങ്ങളുടെ നിവ്വചനവും മറരമാകുന്നു. ഈ വിഭാഗം വിഷയങ്ങളെ എല്ലാം സംഗ്രഹിച്ചിട്ടുള്ള ഒന്നാണെന്നു സമ്മതിക്കുവൻ തരമില്ല. എന്നല്ല, ഗീതക്കൊരു വിശേഷമുണ്ടു്. അതിൻെറ ഒരു സ്വര്യപജ്ഞാനം കിട്ടേണമെന്നുള്ളവർ, അതിനെ ചേണ്ടതുപോലെ, ഉപയോഗപ്രഭമാകംവിധം, മനസ്സിലാക്കേണമെന്നുള്ളവർ, ഗീതയെ പല പ്രാവശ്വം പാരായണം ചെയ്യുകയും ശ്ലോകാത്ഥത്തെക്കുറിച്ചു ചിന്തിക്കുകയും വേണം. അതല്ലെങ്കിൽ, പരസ്സരവിരു ഭാങ്ങളായ പല അഭിപ്രായങ്ങളും അതിലുള്ളതായി ആദ്യം തോന്നിപ്പോകുവാൻ എളുപ്പമുണ്ടു്. വായിക്കുന്നവരെ അവ പകുപ്പിക്കുകയും ചെയ്യും. അതുകാരണമാണു് ഗീതയെ എല്ലാവക്കും ഉപദേശിച്ചു കൂടെന്നു പറഞ്ഞിട്ടുള്ളതു്.

"ഇഭം തേനാ തപസ്സായ നാ ഭക്തായകഭാചന നചാ ശുന്ത്രൂ ഷവേ വാച്വം നചമാംയോട്ട്വസുയതി." ചുരുക്കത്തിൽ പറയുന്നതായാൽ, ഗീതാഭ്വാസം ഭക്തിയോടും യുക്തി യോടും കൂടി ചെയ്യേണ്ടതാകുന്നു. അതുകൊണ്ടുള്ള ഫലപ്രാപ്തിക്ക് ത്രി കരണങ്ങളെക്കൊണ്ടും ശാസ്ത്രവിധി ശ്രാധയോടുകൂടി ചെയ്യുവാൻ ഒരു ക്കവും ഉണ്ടായിരിക്കേണം.

പ്രാപ്യസ്ഥാനത്ത് ചെല്ലുന്നതിന ഗീത കമ്മം, ഭക്തി, ജ്ഞാ നം, എന്നീ മുന്നു മാഗ്ഗങ്ങളെയാകുന്നു കാണിച്ചിട്ടുള്ള തു്. ഇവ സമ്മി ത്രമായിട്ടുള്ള വഴികളാണെന്നും, അതല്ലാതെ അന്യോന്യം യാതൊരാ ത്രയമില്ലാത്തവയല്ലെന്നും അല്പം ആലോചിച്ചാൽ മനസ്സിലാക്കുവാൻ പ്രയാസമുണ്ടാകുകയില്ല. കമ്മം എന്നാൽ ക്രിയ, പ്രവൃത്തി എന്നേ ഇവിടെ അത്ഥമുള്ള. ഭക്തനം ജ്ഞാനിക്കും കമ്മം കുടാതെ കഴിയു മോ? ജ്ഞാനാനഭ്രതിക്കു കമ്മകശലതയോട്ടുകൂടി ചിരകാലം യോഗാ ഭ്വാസം വേണ്ടിവരും. ഭക്തിയല്ലേ മററിരുവക്കുകൂടി ഒരു പ്രോതസാ ഹനകാരണമായിത്തീരുന്നതു്. ജ്ഞാനശകലം ഇല്ലെങ്കിൽ, കമ്മമു ണ്ടോ, ഭക്തിയുണ്ടോ വേണ്ടമാതിരി വളരുന്നു!

ജ്ഞാനമാഗ്ഗം ക്ലേശാവഹമായിട്ടുള്ള ഒന്നാകുന്നു. അതിൽ കൂടിയുള്ള സഞ്ചാരം എല്ലാവക്കും സാദ്ധ്വമായി എന്നു വരികയില്ല. "ബഹ്ഹനാം ജന്മനാമന്തേ ജ്ഞാനവാനാം പ്രപദ്വതേ വാസുഭേവ സവ്വമിതി സ മഹാത്മാസു ഒർല്ലഭ്ദു" എന്നാണ് ഭഗവാൻ തുറന്നു പറയുന്നതു്. അതിനുള്ള കാരണവും അദ്രേഹം കാണിക്കുന്നുണ്ട്. അതിലേക്കു അല്പമൊന്നു മനസ്സോടിക്കു. ഇങ്ങനെ ബുദ്ധിയെ സ്ഥാധീനിപ്പിക്കുന്നതു് എളുപ്പമാണോ? അതിനു എത്രകാലം എന്തെല്ലാം ചെയ്യണം ആലോചിച്ചുനോക്കും. ഔപദ്വേന ഇതു ബുദ്ധിമുട്ടുള്ളതാണ് എന്നല്ലാതെ, മറേറതു രണ്ടും അയത്നസാ ദ്ധ്യങ്ങളാണെന്നു അഭിപ്രായപ്പെടുന്നില്ല. കഠിനമെന്നു കുരുതി കള യേണ്ടുകാത്യവുമുലുന്നു പ്രത്യേകം ഓമ്മവേണം.

"ബുള്യാ വിശുള്യയായുക്കോ ധൃത്വാത്മാനം നിയമ്വപ ശബ്ലാദീൻ വിഷയാംസ്തൃക്തചാ രാഗദേചക്ഷെ വൃദസൃച്ച വിവിക്തസേവിലഘചാശീ യതവാക്കായ മാനസഃ ധ്യാനയോഗപരോന്നിത്വം വൈരാഗ്വം സമുപാത്രിതഃ ന അഹങ്കാരം ബലം ദപ്പ്രം കാമം ക്രോധം പരിഗ്രഹം വിമുച്ച നിമ്മമഃശാന്തോ ബ്രഹ്മഭ്രയായകല്പതേ ""

ഏതായാലും വഴിപിഴക്കാതിരിക്കുവാൻ വിജനവാസം, അല്പാ ഹാരം, വൈരാഗ്വം എന്നിവയെ ശീലിക്കണം. വാങ്മനഃകായനിയ മനം ചെയ്യണം. ചില മനോവികാരങ്ങളെ തീരെ തൃജിക്കണം. എ ന്നാലേ ബ്രഹ്മാവസ്ഥക്കു യോഗ്വനായിത്തീരുകയുള്ള. അതിനശേഷം, ആ അവസ്ഥ ഈ വിധം പ്രാപിക്കുകയും ചെയ്യും.

> "ബ്രഹ്മഭ്രതഃപ്രസന്നാത്മാ ശോചതി ന കാംക്ഷതി സമഃസവ്വേഷഭ്രതേഷ്യ മത്ഭക്തിം ലഭതേപരാം॥ ഭക്ത്വാമാമഭിജാനാതി യാവനൃശ്ചാസ്മിതത്പതഃ തതോമാം തത്പതോജ്ഞചാതചാ വിശതേതദനന്തരം."

ഇവിടെ അല്പമൊന്നു വിവരിക്കാം.

"അമാനിത്വമഭംഭിത്വ മഹിംസാ ക്ഷാന്തിരാജ്ജവം ആചായ്പോപാസനം ശൌചം സ്കൈയ്പമാത്മ വിനിഗ്രഹഃ ല ഇന്ദ്രിയാത്ഥേഷ്യ വൈരാഗ്വ മനഹങ്കാര ഏവച ജന്മമുത്വൂജരാവ്വാധി ഒടുഖഭോഷാന ഒശ്നാല അസക്കിരനഭിഷചംഗം പുത്രഭാരഗ്രഹാഭിഷ്യ നിത്വാച സമചിത്തത്വ മിഷ്യാനിഷ്യോപപത്തിഷ്യ !! മയിചാനന്വയോഗേന ഭക്തിരവ്വഭിചാരിണീ വിവിക്തദേശസേവിത്വ-മരനിജ്ജന സംസതി !! അദ്ധ്വാത്മജ്ഞാന നിത്വത്വം തത്തപജ്ഞാനാത്ഥദശനം ഏതൽ ജ്ഞാനമിതിപ്രോക്ത മജ്ഞാനം യദതോട്രന്വഥാ."

ഇവയിൽ ഒന്നുമുതൽ പതിനൊന്നുവരെയുള്ള ഇണങ്ങൾ പ്രത്വേകിച്ചു കമ്മിക്കും, പന്ത്രണ്ടുമുതൽ പതിനാറുവരെയുള്ളവ ഭക്തന്നും, പതിനേഴ മുതൽ ഇരുപതുവരെയുള്ള വ ജ്ഞാനമാർഗ്ഗിക്കും പററിയവയാകുന്നു. താഴ്ന്നനിലക്കാക്കു ഈശചരപ്രീതിക്കായിക്കൊണ്ട് ശീലിക്കുവാനുള്ള കായ്യുക്കുളെകൂടി ഈ സന്ദ്രഭ്ത്തിൽ കാണിക്കേണ്ടവയാണെന്നു വിശച സിക്കുന്നു.

> "അദേഷാ സവ്വഭ്രതാനാം മൈത്രു കരുണ ഏവച നിമ്മമോ നിരഹങ്കാരു സമ മുഖസുഖു ക്ഷമീ,!! സന്തുഷ്ടു സതതം യോഗീ യതാത്മാ ദ്രഢനിശ്ചയു മയ്യപ്പിതമനോബുലിന്റ്റോ മേ ഭക്തു സമേപ്രിയു!! യസ്മാന്നോദചിജതേ ലോകോ ലോകോന്നോദചിജതേചയു ഹഷാമഷഭയാദേചഗൈ-ഗ്റുക്തോയു സചമേപ്രിയു!! അനപേക്ഷു ഗ്രാചിർഭക്ഷു ഉഭാസീനോ ഗതവ്വഥു സവ്വാരംഭപരിത്വാഗീ യോ മൽഭക്തു സമേപ്രിയു!! യോനഹൃഷ്വതിനദേചഷ്ടി ന ശോചതി ന കാംക്ഷതി ശുഭാശുഭപരിത്വാഗീ ഭക്തിമാൻ യുസമേപ്രിയു!! സമഃശത്തെചമിത്രേച തഥാമാനാപമാനയോു ശീതോഷ്ണ സുഖദുംഖേഷു സമുസംഗവിവജ്ജിതു!! ഇല്വനിന്ദാസ്കൃതിമ്മെനി സന്ത്രഷ്ടോയേനകേനമ്മിൽ അനികേതുസ്ഥിമെതി-ഭക്തിമാൻ മേ പ്രിയോ നരും?"

പ്രായേണ ലോകത്തിൽ, സ്വകായ്യങ്ങളിൽ താല്പയ്യവും വരോപകാരം ചെയ്യുന്നതിൽ അലസതയുമാണല്ലോ കാണുന്നതു്. അതു ഹേതുവായിട്ട്, ഈ വുവടെയുള്ള പടിയിലേക്കു വേണ്ട മനസ്ഥിതിയുണ്ടാകുന്നതു തന്നെ പ്രയാസമായിട്ടല്ലേ ഇരിക്കുന്നതു്? വഴി എളുപ്പമല്ലെന്നു പറയു വാനുള്ള കാരണമതാണു്. ക്ഷിപ്രസാദ്ധ്യമല്ലെങ്കിലും, അഭ്വാസംകൊണ്ട് സാധിക്കാമെന്നുള്ളതിനു സംശയമില്ല. മനുഷ്യജനും കിട്ടിട്ടുള്ള വർ അതു സാധിക്കുകയുംവേണം.

നിഗ്ഗണബ്രഹ്മത്തെ ശരിയായി ഉപാസിക്കുവാൻ അപൂവ്വം ചില ജ്ഞാനിക്കാക്കേ സാധിക്കു. മററുള്ള വക്കു സഇണോപാസന തന്നെ ആത്രയസ്ഥാനം. ഏതുമാഗ്ഗത്തെ അവലംബിക്കുന്ന ആളാ യാലം വേണ്ടതില്ല, എളകിമറിയുന്ന മനസ്സിനെ പതറാതിരിക്കുവാൻ അടക്കി ഒതുക്കി ചിത്തവൃത്തികളെ ക്രമപ്പെടുത്തേണ്ടതായിട്ടുണ്ടു്. അ തിനുള്ള ഭിനചയ്യ, ആഹാരം, ആസനം, അനാഷ്യാനുക്രമം, എന്നിവയെ എല്ലാം ഗീത കാണിച്ചുതരുന്നുണ്ടു്. ഇവയെ സചീകരിച്ചുപോയാൽ പ്രാപ്വസ്ഥാനത്തെത്തുവാൻ വളരെ എളുപ്പമുണ്ടു്.

നിഗ്ഗണബ്രഹ്മത്തിൽ ലയിപ്പാൻ ശക്തിയുള്ള ആത്മജ്ഞാനിയായ വിദചാൻപോലും മററുള്ള വരെ ഭ്രമിപ്പിക്കരുത്ര്. കമ്മം ചെയ്യ ണം. കാരണം ലോകം ശ്രേഷ്യന്മാരെ അനകരിക്കുവാനാണല്ലോ ത്രമിക്കുക.

"ന ബുദ്ധിഭേദം ജനയേദജ്ഞാനം കമ്മസംഗിനാം യോജയേൽ സവ്വകമ്മാണി വിദ്വാൻ യുക്തഃസമാചരൻ യദ്വദാചരതിശ്രേഷ്യ സ്തത്തദേവേനരോജനഃ സയൽപ്രമാണം കരുതേലോക സ്തദനവത്തതേ."

പക്ഷേ, കമ്മമാഗ്ഗാവലംബികഠം ഒരു കായ്യാ പ്രത്വേകം ഓമ്മയിൽ വെക്കേണമെന്നു ഭഗവാൻ ഉറപ്പിച്ചു പറയുന്നുണ്ട്. അതു ചെയ്യാത്ത തുകൊണ്ട് ഇന്നു ലോകം തലകത്തിമറിയുകയും ചെയ്യുന്നുണ്ട്.

"ത്രേയാൽ സ്വധമ്മോവിഇണു പരധമ്മാൽ സ്വനുഷ്ഠിതാൽ സ്വഭാവനിയതംകമ്മ കവ്വാന്നാപ്പോതി കില്ബിഷം." മുക്കിക്കു ജ്ഞാനിയാകേണമെന്നില്ല എന്നു സൂചിപ്പിച്ചുവ പ്ലൊ. ഭക്തിയോടുപ്പടി ഭഗവാനെ ഭജിച്ചാലും മുക്തി ലഭിക്കും. വിശചാ സംവേണം. പരമപ്രേമസ്വരുപത്തോടുകൂടിയതാണു് ഭക്തി. "കാര രണമനേചപ്പിക്കാത്ത പരപൂർണ്ണവിശചാസമൊന്നാണു് ഭക്തിമാഗ്ഗ ത്തിന്റെ നാരായവേരു".

"പത്രം പുഷ്പം ഫലം തോയം യോമേ ഭക്ത്വാസ്രമ്മതി തദഹം ഭക്ത്വപഹൃത മഗ്നാമി പ്രിയതാത്മനു" ഭഗവന്നാമസങ്കീത്തനം, ഭാഗവതാദിപുരാണവായന, ഭക്തന്മാരായുള്ള

സംസഗ്ഗം, ഇവയെല്ലാം ഭക്തിയുടെ അഭിവ്വഭ്യിക്കു ഹിതകരങ്ങളായ ഹേതുക്കളാകുന്നു. സംശയലേശംപോലുമില്ലാതെ ഭജിക്കുവാൻ ഭഗവാൻ ശക്തിയോടുകൂടി ഉപദേശിക്കുന്നുണ്ടു്.

"മന്മനാഭവമത്ഭക്തോ മള്യാജീമാം നമസ്ത്യത മാമേ വൈഷ്യസി സത്യം തേ പ്രതിജാനേ പ്രയോസിമേ." കമ്മമാഗ്ഗത്തെ ഇതരമാഗ്ഗങ്ങളിൽവെച്ചു സുഗമമെന്ന രീതിയിലാണു് ഗീതയിൽ പ്രതിപാദിച്ചിട്ടുള്ള ഇ്. കമ്മമെന്നാൽ വിഹിതമായ കമ്മം എന്നത്ഥം. എല്ലാവരും കമ്മാചെച്ചുന്നു. ആഷ്ം അതൊഴിച്ചുക ടുന്നതല്ലു.

"നഹി കശ്ചിൽ ക്ഷണമപി ജാതുനിമ്പുത്വകമ്മക്കൽ കായ്യതേഹൃവശഃ കമ്മ സവ്വഃ പ്രകൃതിജൈർഗുണൈഃ" യോഗികളം കാമാംചെയ്യുന്നു.

"കായേന മനസാബുദ്ധ്വാ കേവലൈരിന്ദ്രിയൈരപി യോഗിനം കമ്മകവ്വന്തി സംഗം ത്വക്തചാത്മശുദ്ധയേ."

ഭഗവാൻകൂടി കമ്മം ചെയ്തുകൊണ്ടേ ഇരിക്കുന്നു.

"നമേ പാത്ഥാസ്ഥികത്തവ്യം തിഷുലോകേഷുകിംചന നാനവാപ്പമവാപ്പവ്യം വത്ത ഏവച കമ്മണി."

പ്രവത്തി (കമ്മ) മാഗ്ഗത്തിൽക്രടിയല്ലാതെ പ്രകൃതിക്കു പ്രത്യ ക്ഷമാകുവാൻ വഴിയില്ല. പരമാത്മാവിനെ അനുമാനിക്കുന്നതു പ്രകൃ തിമൂലമല്ലാതെയും തരമില്ല. അതുകൊണ്ടും കമ്മത്തിന്റെ പ്രാധാന്വ്യം ഊഹിക്കാവുന്നതാകുന്നു.

കമ്മമാഗ്ഗത്തിൽ ചരിച്ചാൽ പരമപഭം കിട്ടുമോ എന്നു സം ശയിക്കേണ്ട.

"കമ്മണൈവഹി സംന്നിദ്ധി മാസ്ഥിതോ ജനകാദയഃ— ലോകസംഗ്രഹമേവാപി സംപശൃൻ കത്തുമഹസി."

ഫലാപേക്ഷയും കർത്തുതചാഭിമാനവും കൂടാതെ ലോകസംഗ്രഹത്തി നായിക്കൊണ്ടുള്ള കമ്മമാണാ് കമ്മം. ഞ വക പ്രവൃത്തിച്ചിൽ ഏ പ്പെട്ടിരിക്കുന്നാളാണു് കമ്മയോഗി. അജ്ഞനു ഫലേച്ഛയായിരിക്കും പ്രവത്തിക്കുള്ള പ്രേരണശക്തി; ബുദ്ധിമാന സ്വധമ്മബോധമായിരി ക്കും. പരോപകാരം പുണ്വം, പാപം പരപീഡനവും. ഈ വി<mark>ചാരം</mark> സവ്വോൽകൃഷ്പത്തിന്നും കാരണമാണു്. സ്വച്ചമമായ അന്തക്കരണമുള്ള വക്ക് സമബുദ്ധി സവ്വ്സാധാരണയായിരിക്കും. അങ്ങനെയുള്ള സന്മ നസ്സണ്ടാകുവാനം ഉണ്ടാക്കുവാനം ആകുന്ന സ്വദേശാഭിമാനികഠം ത്ര മിക്കേണ്ടതു്. ധനാജ്ജനത്തിന്നായി ലോകമാസകലം സമരം നടക്കുന്ന ഇക്കാലത്ത് ഈശവരപ്രഭാവത്തെ കുറിച്ചു പ്രസംഗിക്കുന്നതും **ആ ശ** ക്തിയെ അദ്ധ്വാരോപിക്കുവാൻ ത്രമിക്കുന്നതും പക്ഷെ സാഹസമായി രിക്കും. എങ്കിലും സ്രഷ്പാവ്, നേതാവും നാഥനമാണെന്നും, ഈ കാണു ന്നതെല്ലാം ദൈവവിലാസമാണെന്നും, ബാലവ്യദയങ്ങളെ ധരിപ്പിച്ച് അവരെ സഭാചാരങ്ങളിലും ഈശചരാരാധനയിലും പ്രേരിപ്പിച്ചു നയി പ്പിക്കേണ്ടതു് സന്മാഗ്ഗനി<mark>ഷ്ണാത</mark>ന്മാരായ ഗുരുജനങ്ങളുടെ കത്തവ്വു**ങ്ങ** ളിൽ ഒട്ടും **അ**പ്രധാനമലാത്ത ഒന്നാണല്ലോ. ഈ തരത്തിലുള്ള **ഗുരു** വരന്മാർ വളരെ പേർ ഉണ്ടായിവരട്ടെ എന്നു പ്രാത്ഥിച്ചുകൊണ്ട് ഈ **ഉ**പന്യാസത്തെ ഉപസംഹരിച്ചുകൊള്ള ട്ടെ.

ധചനികാരംൻറ എതിർവാദികഠം

By P. KRISHNAN NAIR, V. S. SIROMANI, UNIVERSITY OF MADRAS.

*"കാവ്വസ്വാത്മാ ധചനിരിതി ബുധൈയ്യസ്സമാമ്റാതപൂവ്വ-സ്തസ്വാഭാവം ജഗദരപരേ ഭാക്തമാഹുസ്സമന്വേ കേചിദചാചാം സ്ഥിതമവിഷയേ തത്തചമുചുസ്തദീയം തേന ബ്രൂമസ്സഹുദയമനഃപ്രീതയേ തത്സചര്രപം."

എന്നിങ്ങിനെ ആനന്ദവദ്ധനാചായ്റ്റർ തൻറെ ധാന്വാലോകത്തിലെ പ്രഥമകാരികയെക്കൊണ്ടു പ്രകാശിപ്പിച്ചിരിക്കുന്ന ധാനിപ്രസ്ഥാനവി രോധിയായ അഭാവവാഭവും ഭാക്തവാഭവും അനാഖ്വേയവാഭവും, † "ന ചാസ്മാഭിരഭാവവാഭിനാം വികല്പാു ശ്രതാു; കിന്ത്ര സംഭാവ്യ ദൃഷയിഷ്യ ന്തേ" ഇത്വാദി ലോചനവാക്വമന്തസരിച്ചു കേവലം സംഭാവനീയങ്ങളാ ന്നെന്ന വരികിലും,

‡ തഥാചാന്വേന കൃത ഏവാത്ര ശ്ലോകഃ — "യസ്മിന്നസ്സി ന വസ്തു കിഞ്ചന മനഃപ്രഹ്ലാഭി സാലംകൃതി വ്വൽപണൈ രചിതഞ്ച നൈവ വചനൈവ്വ്കോക്തിശുത്വഞ്ച യൽ

* "കാവ്യാത്താവെന്നു പണ്ടേ ബുധപരിവൃഢമാൽ സമ്യഗാമ്മാതമാമതോ-ന്നില്ലത്രേ ഹൃദ്യമാമാധപനി; ചിലാതിനെ ബ് ഭാക്തമെന്നോതിടുന്നു; ഘോഷിച്ചിട്ടുണ്ടു വേറേചിലരിതവിഷയം വാക്കിനെന്നാകയാൽ നോം തമ്യൂ പം നിവ്വചിക്കാം സഹൃദയഹൃദയാനനുസിദ്ധിക്കിഭാനീം."

(കാധിരാണകം-ഭായ)

† നേരം അഭാവവാഭികളുടെ വിചരീതാഭിപ്രായങ്ങൾ കേശക്കുകയുണ്ടായിട്ടില്ല്. എങ്കിലും സംഭാവനാലെയ്ത ഖണ്ഡിക്കാൻ പോകുന്നു.

‡ ഇതിനേക്കുറിച്ചു[®] ഏതാണ്ടൊരു കുവി ഒരു പള്യം നിമ്മിച്ചിട്ടുമുണ്ടു[®]. "യാതൊന്നിൽ തെെല്ല സാലാകൃതി സമസമാനാഹ്റ്റാളിയാം വസ്തുവില്ലെ<u>»</u> ന്നല്ലേ വൈചിത്വിയ്ക്കുന്നും വചനനിചയമാന്നല്ല വക്രോക്ക്വിയില്ല; അക്കാവ്യം പ്രീതിമൂലം ധചനിവിലസിതമെന്നാത്തിടും മുശ്ധമരന്താം ണാവേം ചോളിക്കിലോതുന്നിതു സുമതിയൊടായ[®] തൽസചരുപപ്രകാരം."

(കാവ്വാദലാകം--ഭാഷ)

കാവ്വം തഭാചനിനാ സമനചിതമിതി പ്രീത്വം പ്രശംസൻ ജഡോ നോ വിട് മോഭിദധാതി കിം സുമതിനാ പ്രഷ്ക്ഷ സചര്രവം ധചനേദ" എന്ന ഗ്രന്ഥസന്ദദ്ംകൊണ്ടും വിശേഷിച്ച്, * "ഗ്രന്ഥകൃൽസമാനകാല ഭാവിനൈവ മനോരഥനാറ്റാ കവിനാ" എന്ന ലോചനപംക്തികൊണ്ടും ധചനികാരൻറ കാലത്തുതന്നെ ധചനിപ്രസ്ഥാനിവിരോധിയായി മനോ രഥനെന്നാരു കവിയുണ്ടായിരുന്നുവെന്നറിയുന്നുണ്ടു്.

ഭാമഹാദികളായ പ്രാചിനാലങ്കാരികനാരുടെ സാഹിത്വശാ സനങ്ങൾക്കു വിധേയങ്ങളായി ആത്മമഹത്തപുപേക്ഷിച്ചു കാവ്വോപ സ്തരണകൃത്വം നടത്തി ഇച്ഛമായ രീതിയിൽ ജീവിച്ചുപോന്ന സേഭാവാ ഭികളേയും നാമാന്തരത്തിൽ അജ്ഞാതവാസമനുവ്യിച്ചുകൊണ്ടു ക്ലേശി ച്ചു കാലംകഴിച്ചിരുന്ന വസ്തപലങ്കാരധചനികളേയും മഹാനായ ആനന്ദ വല്ാനാചാത്വർ 'ധചന്വാലോകം' വഴിക്ക് അക്രട്ടരുടെ കൃരശാസന ജ്ജളിൻപിടിയിൽനിന്നു വിടുവിച്ചു സാഹിത്വസാഗ്രാജ്വത്തിൽ യഥായോ ഗം ഉത്തമസ്ഥാനം നല്ലി ആക്കുമെളുപ്പത്തിൽ ഇളക്കുവാൻ കഴിയാത്ത വണ്ണം പ്രബലമായി പ്രതിഷ്ഠിച്ചിരുന്നിട്ടും ആ പ്രതിഷ്യയെ ആക്രമിച്ചു ധചനിസാഗ്രാജ്വത്തെ അലങ്കോലപ്പെടുത്തുവാൻ പ്രതിയോഗിക്കം പരി ശ്രമിച്ചുനോക്കാതിരുന്നിട്ടില്ല.

> "ഏതേന ശബ്ദസാമത്ഥ്വ-മഹിറ്റാ സോപി വാരിതഃ യമന്വഃ പണ്ഡിതംമന്വഃ പ്രപേദേ കഞ്ചന ധ്വനിം വിധേർനിഷേധാവഗതിവ്വിധിബുദ്ധിർനിഷേധതഃ ഭമധമ്മിഅ വീസത്ഥോ മാ സ്മ പാന്ഥ ഗ്രഹം വിശ മാന്നാന്തരപരിച്ഛേദ്വ-വസ്തുര്രപോപദേശിനാം ശബ്ദാനാമേവ സാമത്ഥ്വം തത്ര തത്ര തഥാ തഥാ അഥവാ നേദ്ദശീ ചച്ചാ കവിഭിസ്സവ ശോഭതേ വിദ്വാംസോപി വിമുഹൃന്തി വാക്വാത്ഥേ ഗഹനേജ്വനി."

എന്നിങ്ങിനെ ആക്ഷേപിച്ഛിരിക്കുന്ന ന്വായമഞ്ജരീകാരനായ ജയന്ത **ഒട്ടൻേറ**യും മറ**ും** സ്ഥിതിയിരിക്കട്ടെ; ധചനിപ്രസ്ഥാനത്തിന്നു വിരോ

^{*} ഗ്രന്ഥകാരത്തെ സമാനകാലികനായ മനോരഥനെന്ന കവിയാ**ൽ**.

ധികളായി സാഹിത്വശാസ്ത്രകാരന്മാരിൽത്തന്നെ പലരും ഉണ്ടായിരുന്നു. ഭട്ടനായകൻ, പ്രതീഹാരേന്ദ്രരാജൻ, ധനഞ്ജയൻ, ധനികൻ, മഹിമഭ ട്ടൻ എന്നിവരാകുന്നു അവരിൽ പ്രധാനന്മാർ. ആനന്ദവദ്ധനാചായ്യ അടെ ധപനിപ്രതിഷ്യയെ അഭിജ്ഞോത്തമനായ അഭിനവഗുപൂപാഭാചാ യ്യർ യുക്തികളെക്കൊണ്ടും പ്രമാണങ്ങളെക്കൊണ്ടും 'ലോചന'മെന്ന **അ** ഭേഭ്വമായ ഒരു കോട്ട കെട്ടി സുരക്ഷിതമാക്കിട്ടുപോലും അതൊന്നും കൂട്ടാ ക്കാതെ മഹിമഭട്ടൻ വളരെ ശക്തിയോടുകൂടി എതിത്തിരിക്കുന്നു. വക എതിപ്പ് ക**ം** തീരെ ശമിച്ചതു മമ്പടഭട്ടന്റെറ കാവ്വപ്ര**കാശത്തിന്നു** ശേഷമാണെന്നു വേണം പറവാൻ. മമ്മട്ടെന്നു സചല്പം മുമ്പുണ്ടായി രുന്ന സരസ്വതീകണ്ഠാഭരണം, ശുംഗാരപ്രകാശം എന്നിവയുടെ കത്താ വായ ഭോജനം പിമ്പുണ്ടായിരുന്ന 'അലങ്കാര ശേഖര'കാരനായ കേശവ മിത്രനും മററും പ്രാചീനപദ്ധതിയെയാണു് അനുസരിച്ചിരിക്കുന്നതെങ്കി ലും വിശേഷിച്ചു ധ്വനിനിരാസത്തിന്ത് അവർ ഇനിഞ്ഞിട്ടില്ല. 'വക്രോ ക്തിജീവിത'കാരനായ കന്തകന്റെ വക്രോക്തിജീവിതവാഭവം 'ഔചി ത്വവിചാരചച്ചാ'കാരനം അഭിനവഗുപ്പശിഷ്യനമായ ക്ഷേമേന്ദ്രൻറ **ൌചി**ത്വജീവിതവാദവും പ്രകാരാന്തരത്തിലുള്ള പ്രതിപാഭനം മാത്രമാ ണെന്നല്ലാതെ ധ്വനിപ്രസ്ഥാനത്തിന്നു വിരുഭ്യമായി വിചാരിക്കവയ്യു. ധ്വനിപ്രസ്ഥാനത്തിന്റെ പ്രധാനവിരോധിക്കം ഭട്ടനായകാഭികളാകുന്നു. അതിലും ധ്വനിനിരസനത്തിന്നായി ഐദമ്പത്രേണ പ്രവത്തിച്ചിരിക്കു ന്നവർ ഭട്ടനായകനം മഹിമഭട്ടനമാണു്. കേവലം ധചനിഖണ്ഡനത്തി ന്നായി യഥാക്രമം 'ഹൃദയദപ്പ്ണം' എന്നം 'വ്വക്തിവിവേകം' എന്നം **ഓരോ ഗ്രന്ഥം** നിമ്മിച്ചിട്ടുള്ളവർ അവർ മാത്രമാണല്ലോ. ഭട്ടനായ കൻെറ എടയടപ്പ്ണം ഇതുവരെ കണ്ടുകിട്ടിട്ടില്ലെയിലും,

"സഹസാ മശോധിഗന്ത്രം

സമുഭ്വതാടദ്രഷ്പദപ്പ്ണാ മമ ധീം"

എന്ന 'വ്യക്തിവിവേക'പദ്യത്തിന്റെ വ്യാച്യാനത്തിൽ കാണുന്ന "ഒപ്പ്ണു എദയദപ്പ്ണാഖ്യോ ധ്വനിധ്വംസഗ്രന്ഥോപി" എന്ന വാ ക്യാംകൊണ്ട് 'വൃക്തിവിവേകം'പോലെ ഇതും ഒരു ധ്വനിഖണ്ഡനഗ്ര ന്ഥമാണെന്നു വിചാരിക്കാവുന്നതാണു്. 'ഏദയദപ്പ്ണം' കാരികയും

വൃത്തിയും കൂടിയതാണെന്നു ലോചനകാരൻ ഉദ്ധരിച്ചുകാണിച്ച ഭാഗ **അഗംകാ**ണ്ടു ഗ്രഹിക്കാം. മഹിമഭട്ടൻെറ ധചനിഖണ്ഡനാത്മകമായ 'വൃക്തിവിവേക'ത്തിന്ത് അലങ്കാരസവ്വ്സചകാരൻ പ്രൌഢവും മഹ നീയവുമായ ഒരു വ്വാഖ്വാനം നിമ്മിച്ചിട്ടുണ്ടു്. എന്നാൽ, അതിൽ വൃക്തിവിവേകകാരൻെറ് അഭിപ്രായത്തെ ഖണ്ഡിച്ചുകൊണ്ടു ധചനി കാരമതത്തെ സ്ഥാപിക്കയാണ് വ്യാഖ്യാതാവ് ചെയ്തിരിക്കുന്നത്. കാലഭോഷത്താൽ പ്രസ്തുതവ്യാഖ്യാനം മുഴവനും ലഭിക്കാതിരിക്കുന്നതു സാഹിത്വശാസ്ത്രസമ്പത്തിക്ക് വലിയ ന്ലൂനതയാണെന്നു പറയേണ്ടിയി കിട്ടിയേടത്തോളം — ആഭ്വംത്ത വിമശനത്തിന്നും രണ്ടാമ ത്തേതിൽ വാച്വാവചനദോഷപ്രസ്താവത്തിലെ അത്ഥശ്ശേഷനിരൂപണ പ്രസ്താവം വരേയും—വ്വാഖ്വാനത്തോടുകൂടി 'വൃക്തിവിവേകഗ്രന്ഥം' അനന്തശയനം സംസ്തതഗ്രന്ഥാവലിയിൽ 5-ാം നമ്പറായി പ്രസിദ്ധപ്പെ ട്ടത്തിട്ടുണ്ട്. കൂടാതെ, 'മധുസൂദനവിവ്വതി' എന്ന ഇഭാനിതനവ്യാഖ്വാന ത്തോടുകൂടി കാശി സംസ്തൃതഗ്രാസ്ഥമാലവകയായും ഒരു പതിപ്പു പുറ ചുക്തിവിവേകകാരൻെറ അനുമാനവാഭം എൻെറ 'കാവൃാലോക'ത്തിനള്ള 'ആസ്ഥാഭപഭവി' എന്ന വൃാഖ്യാനത്തിൽ സംഗ്രഹിച്ചെടുത്തു കാണിച്ചു ഖണ്ഡിച്ചിട്ടുള്ള തിനാൽ ഇവിടെ പ്രസ്താ ഭട്ടനായകൻെറ വാദപ്രകാരം അഭിനവഗുപ്ലാചായ്പർ ലോചനത്തിൽത്തന്നെ അനുവഭിച്ചു നിരസിച്ചിരിക്കകൊണ്ടു് ഉപേക്ഷി ച്ചിരിക്കുന്നു.

പ്രതീഹാരേന്ദ്യമാജൻ, ധനഞ്ജയൻ, ധനികൻ എന്നിവർ ധാ നിനിരാസത്തിന്നായി പ്രത്യേകം ഗ്രന്ഥം നിമ്മിച്ചിട്ടില്ല. പ്രതീഹാരേന്ദ്ര രാജൻ ഉള് ഭടൻറ 'കാവ്വാലങ്കാര'ത്തിന്നുള്ള തൻെറ വ്യാഖ്വാനമായ 'ലഘവിവ്വതി'യുടെ അവസാനം *"നന്ദ്ര യത്ര കാവ്വേ സഹ്യദയഹ്യഭയാ ഹ്ലാദിന്നു പ്രധാനഭ്രതസ്വ സ്ഥയബ്ലവ്വാപാരാസ് പ്രഷ്ട്രതേവന പ്രതീയ മാനൈകരൂപസ്യാത്ഥസ്വ സള് ഭാവ സ്തത്ര തഥാ വിധാത്ഥാഭിവ്വക്തി

^{*} ആട്ടെ, യാതൊരു കാവ്യത്തിൽ സഹ്യമയഹ്ലാമിയും പ്രധാന**ളതവും** അഭിധയോ ലക്ഷണായാ ആയ ശബ്ദവ്യാപാരത്തിനു വിഷയമാകാരെ പ്രതീയമാന മാത്രസചരുപവുമായ അത്ഥം വിലസ്യനാവോ അത്തരത്തിലുള്ള അത്മത്തിനു ഹേതുവും

ഫേതും കാവ്വുജീവിതഭ്രതം കൈശ്ചിത്സഹൃദയെർധ്വനിർനാമ വ്യാജ കഭേദാത്മാ കാവ്വധമ്മോഭിഹിതം. സ കസ്മാദിഹനോപദിഷ്ടാം" എന്നു ചോദിച്ചുകൊണ്ട്, *"ഉച്ചത്ര; എഷേചവാലങ്കാരേഷചന്തഭാവാൽ" എ ന്ന തുടങ്ങുന്ന ഗ്രന്ഥസന്ദഭാകൊണ്ട് അലങ്കാരങ്ങളിൽ അന്തഭാവമുപ പാദിച്ചു ധ്വനിപ്രസ്ഥാനത്തെ നിരസിക്കുകയാണു് ചെയ്തിരിക്കുന്നതു്.

ധനഞ്ജയൻെറ മതം ധചനിപ്രസ്ഥാനാനുസാരിയല്ലെങ്കിലും അദ്ദേഹം തൻെറ 'ഭശരൂപക'ത്തിൽ ധചനിവാദമനുവദിച്ചു ഖണ്ഡിക്കു ന്നില്ല.

"വാച്വ്യപ്രകരണാദിഭ്യോ ബുജ്ധിസ്ഥാ വാ യഥാ ക്രിയാ വാക്വാത്ഥഃ കാരകൈയ്യ്പക്താ സ്ഥായീ ഭാവസ്തഥേതരൈഃ" എന്ന കാരികയെക്കൊണ്ട്, ലൌകികവാക്വത്തിൽ വാച്യമോ ബുജി

എന്ന കാരികയെക്കൊണ്ട്, ലൌകികവാക്വത്തിൽ വാച്വമോ ബുഖി സ്ഥമോ ആയ ക്രിയ കാരകവിശിഷ്പമായ്ക്കീന്ന് വാക്വാത്ഥമാകുന്നതു പോലെ കാവ്വവാക്വത്തിൽ വാച്വുമോ ബുഖിസ്ഥമോ ആയ രത്വാഭി ഭാവം വിഭാവാഭിവിശിഷ്പമായി വാക്വാത്ഥമായി ഭവിക്കുന്ന എന്നമാത്രം പറഞ്ഞു കടന്നുകളകയാണ് ചെയ്തിരിക്കുന്നത്ര്.

ഭശത്രപകവൃത്തികാരനായ ധനികൻ അത്രമാത്രംകൊണ്ടു തു പൂിപ്പെടുന്നില്ല. അദ്ദേഹം തൻറ 'അവലോക'മെന്ന വൃത്തിയിൽ ധച നികാരൻറ മതത്തെ സംക്ഷേപിച്ചനുവലിച്ചുകൊണ്ടു്, ധനഞ്ജയൻറ "വാച്ചുപ്രകരണ—" എന്ന കാരികയെ അവതരിപ്പിക്കുകയും ∗"യൽ പരശ്ശബ്ലസ്സശബ്ലാത്ഥഃ" എന്ന നയം പുരസ്തരിച്ചു ധചനി താൽപയ്യാ ത്ഥത്തിൽനിന്നു ഭിന്നമല്ലെന്നും രസത്തിന്നും കാവ്വൃത്തിന്നുമുള്ള സംബ ന്ധം ഭാവ്വൃഭാവകഭാവമാണെന്നും പ്രതിപാഭിച്ചുകൊണ്ടു ധചനിപ്രസ്ഥാ നത്തെ എതിത്തിരിക്കുന്നു. ധനികൻേറയും പ്രതീഹാരേന്ദുരാജൻേറയും ധചനിഖണ്ഡനും നിസ്സാരമാകയാൽ ആസചാദപദവിയിൽ ഭട്ടനായ കൻേറയും മഹിമഭട്ടൻേറയും വാദങ്ങുംകെന്നപോലെ പ്രാധാന്വൃം

കാവ്വാത്തളതുവാ ധചനിയെന്നു പ്രസിദ്ധവും വ്യാജകഭേദത്രപവും ആയ കാവ്വാധമ്മാ ചില സഹുദയന്മാരാൽ പറയപ്പെട്ടിരിക്കുന്നു. അത്ര് എന്തുകൊണ്ട് ഈ ഗ്രന്ധക്തിൽ പറഞ്ഞില്ല.

^{*} പറയാം; ഈ അലങ്കാരങ്ങളിൽത്തന്നെ ഉരപ്പെടുകയാ**ൽം**

കൊടുത്തിട്ടില്ലെങ്കിലും — പ്രത്വേകമെടുത്തു വിസ്തരിച്ചു ഖണ്ഡിച്ചിട്ടില്ലെ ങ്കിലും — മതാന്തരനിരാസാത്ഥം പ്രദശിപ്പിക്കപ്പെട്ട യുക്തികളെ ക്കൊ ണ്ട് അവയേയും യഥാസന്ദ്രദ്ദം നിരസിച്ചു കാണിച്ചിട്ടുണ്ട്. 'ആസചാദ പദവി'യോടു കൂടിയ 'കാവ്വാലോക'ത്തിനെറെ മുദ്രണം ആരംഭിച്ചിരിക്ക യാൽ ആ ഗ്രന്ഥം അടുത്തുതന്നെ മളിരാശി വിശചവിദ്വാലയത്തിൽനിന്നു പ്രസിദ്ധപ്പെടുത്തുന്നതാണു്.

സാഹിതൃശാസ്ത്രകാരന്മാരിൽത്തന്നെ സാക്ഷാൽ ധ്വനിപ്ര സ്ഥാനവിരോധികളായ ആലങ്കാരികന്മാരാരെല്ലാമാണെന്നു മാത്രമാ ണ് ഇവിടെ ഉപനൃസിച്ചിരിക്കുന്നത്. ഇതരശാസ്ത്രകാരന്മാരിൽ വൈയാകരണന്മാർ ഒഴിച്ചു മറവുള്ള വരാരും—നൈയായികമാർ, മീമാം സകന്മാർ, വേദാന്തികഠം എന്നിവരാരും—ശബ്ദത്തിന്നു ധ്വനനമെന്നു അതിരിക്തമായ വ്യാപാരം സ്വീകരിക്കുന്നില്ല. വിപുലവും ഗഹനവും അപ്രസ്തുതവുമായ ആ വക വിചാരത്തിന്ന തൽക്കാലം പുറപ്പെടുന്നില്ല.

^{*} ശബ്ദത്തികനിന്നു് ഏതേതത്ഥങ്ങളാക്കു പ്രതീതിവരുന്നുവോ **അതെല്ലാം ശബ്ദ** ത്തിന്റെ അത്ഥാതന്നെയാണ്ട്.

കവിത By K. K. KURUP

(ഒരു നിരൂപണം).

കവിതയ്ക്ക് പല ഭാഷകളിലും പല നിവ്വ് ചനങ്ങളുമുണ്ടെങ്കിലും സവ്വാത്മനാ പൂണ്ണമായും, സവ്വ് സമ്മതവുമായുള്ള ഒരു കാവ്യലക്ഷണം കണ്ടു കിട്ടുമോ എന്ന സംശയമാണ്. നാം കാണുന്ന കവിതാവിവര ണങ്ങളിൽ അധികഭാഗവും നിരൂപകനാരാൽ നിമ്മിതവും, ബാക്കിയുള്ള കവികളാൽത്തന്നെ കതവുമാകുന്നു. ഒരു വിമശ്കന്റെ കാവ്യ നിവ്വ് ചനമാണെങ്കിൽ അതു് അപഗ്രഥനരിതിയിൽ കാവ്യാംശങ്ങളെ വിവരിയ്ക്കുന്നതും, അതിനാൽ സാധാരണന്മാക്ക് സ്ഗ്രഹമല്ലാതെയുള്ള തുമായിരിയ്ക്കും. ഒരു കവിയുടെ കവിതാവിവരണമാണെങ്കിൽ അതു് കവിതാരചനയ്യും ഉപയുക്കങ്ങളായ കവിധമ്മങ്ങളെ ക്രോഡീകരിക്കുന്നതും, അതിനാൽ കവിവുളയത്തെ പ്രകാശിപ്പിയ്യുംന്നതുമായിരിക്കുമെന്നും അതിനാൽ കവിവുളയത്തെ പ്രകാശിപ്പിയ്യുംന്നതുമായിരിക്കുമെന്നും തീര്വ്വ് ആത്മാവിനേയും അവലോകനം ചെയ്യുന്നതുകൊണ്ടാണ് അ വർ രണ്ടു പേരുടേയും കാവ്യനിവ്വ് ചനങ്ങറം ഇങ്ങിനെ രണ്ടു വഴിയ്യൂം തിരിയുന്നതു്.

കവിതയെന്നാലെന്താണെന്നം, അതിൻെറ ഉദ്ദേശമെന്താ ണെന്നം, പ്രഥമായിത്തന്നെ ആരാഞ്ഞു നോക്കാം. കവിത വികാര പരമായിരിയും,ന്നതാണെന്ന സംഗതിയെപ്പററിയേടത്തോളം പാശ്ചാ ത്വരം, പൌരസ്ത്വരുമായ കവികളം, കാവ്വവിമശ്കുവാരം ഏറെക്കുറെ ഏകാഭിപ്രായക്കാരായിട്ടാണ് കാണപ്പെടുന്നതു്. കാവ്വത്തിൻറ ഉദ്ദേശം ധമ്മാധമ്മോപദേശമോ, ആഹ്ലാദപ്രഭാനമോ എന്നുള്ളതിനെ പ്രററി പൊരസ്തുാലങ്കാരികന്മാരുടെ ഇടയിലെന്നപോലെ പാശ്ചാത്വ വിമൾകന്മാരുടെ ഇടയിലും പല തക്കങ്ങാം നടന്നിട്ടുണ്ട്. യവനചി ന്താഗ്രേസനോയ പ്രേറോ കാവ്വത്തിൻെറ മുഖ്യകത്തവൃമായിക്കണ ക്കാക്കിയത് അതോപദേശത്തെയാണ്. ബെൻ ജോൺസൺ, കാർലൈൽ മുതലായ പലെ അനന്തരകാലീനന്മാരും പ്രേറോവിൻറെ അനത്തായികളായിരുന്നു. എന്നാൽ അരിസ്റ്റോട്ടിൽ എന്ന യവനമഹാ പണ്ഡിനൊകടെ ആനന്ദപ്രഭായിത്വത്തിന്നാണ് പ്രാധാന്വം കല്ലി ച്ചത്ര്. "കാവ്വമെന്നത് മനസ്സിൻറെ സച്ചുവും, സ്വതന്ത്രവുമായ ഒരു വ്യാപാരവിശേഷമാകുന്നു. അത്ര് മതം, രാഷ്പം മുതലായവയുടെ പരിധിയിൽനിന്ന് പുറമെനില്ലുന്ന ഒന്നാണതാനും. വിദ്വാഭ്യാസം, സാന്മാഗ്ഗികപോഷണം എന്നിവയിൽനിന്ന് ഭിന്നമായി സ്വന്തമായോ അദ്രേശമാണതിന്തുള്ള്." ഇത്രെ അദ്രേഹത്തിൻറെ അഭിപ്രായം. ബേക്കൺ, ഡോക്ടർ ജോൺസൺ, കോളറിഡ്ജ്, ഹാസിലിററ് ഇട്ട ജ്ലിയ ആംഗ്ലോയവിഭച്ചപ്പിരോമണികളെല്ലാം ഈ അഭിപ്രായത്തെ സ്വീകരിച്ചവരായിരുന്നു. "മനസ്സിനെ ആഹ്ലാഭിപ്പിച്ചു വിചാരങ്ങറംക്ക് ഉല്ലർഷം നൽകകയാണ് കാവ്വത്തിൻറെ ധമ്മ"മെന്ന് കീററ്സ് മഹാകവി തൻറെ ഒരു കൃതിയിൽ പ്രഖ്യാപനം ചെയ്തിട്ടുണ്ട്. ഭൂരിപ ക്ഷം വിമശകനാരാൽ അംഗീക്രതമായ മതവും ഇതുതന്നെയാണ്.

"ധ്വനി പ്രധാനം കാവ്വത്ത കാന്താസമ്മിതമീരിതം ശബ്ദാത്ഥൌ ഗുണതാം നീത്വാ വ്യഞ്ജനപ്രഭവം യത്ദ"

ത്തകപ്പാടെ നോക്കുമ്പോരം കാവ്വാമെന്നത് രസാത്മകമായ വാക്വമാ നെന്നരം, രമണീയാത്ഥപ്രതിപാഭകമായ ശബ്ദമാണെന്നും, കാന്താസ മ്മിതമാണെന്നും മററും നമ്മുടെ ആലങ്കാരികന്മാർ പറഞ്ഞിട്ടുള്ള തു തന്നെയാണ് പാശ്ചാത്വരും പറയുന്നത്ല്. പഞ്ചസാരയിൽപൊതി ഞ്ഞ സഞ്ജിവിനിയെപ്പോലെയാണ് കാവ്വാ ധമ്മാധമ്മബോധത്തെ ആഹ്ലാഭജനകമായ രീതിയിൽ നമുക്കു നൽകുന്നത്ല്. രാമണീയകവും, രസവും തന്നെയാണ് കാവ്വത്തിന്റെ മുഖ്വലക്ഷണങ്ങരം; അഥവാ കാവ്വോഭ്വാനത്തിലെ കുസുമങ്ങരം രാമണീയകങ്ങളും, മകരന്ദം രസവു മാകുന്നു എന്ന് മറെറാരുവിധത്തിൽ പറയാം. അതായത്ല് കാവ്വ ത്തിന്റെ ആസ്പഭം സൌന്ദയ്യവും, വിത്രാന്തി, രസജന്വമായ ആനന്ദ ത്തിലുമാകുന്നു എന്നത്ഥം. ഇവിടെ സൌന്ദയ്യമെന്നും രസമെന്നമുള്ള പടങ്ങാക്കുട് ഏററവും വിവൃതവും ബഹുഗ്രഹവുമായ അത്ഥം കൊടു കേണ്ടതാണു്.

> "കണ്ണം ഗതം ശുഷ്വതി കണ്ണ ഏവ സങ്ങീതകം സൈകതവാരിരീത്വാ ആനന്ദ്രയത്വന്തരനുപ്രവിശ്വ സൂക്തിഃകവേരേവ സധ്ധസഗന്ധാ."

മണലിൽച്ചെന്നു ചേരുന്ന വെള്ള ംപോലെ സണ്ണീതം ചെവിയിൽ കേറി യാൽ അവിടെത്തന്നെ വററിപ്പോകന്നു; അകത്തു കടന്നു് ആനന്ദിപ്പി കുന്നതു് അമുതതുല്വമായ കവിസൂക്തി മാത്രമാകുന്നു.

ശക്തിയോടുകൂടി ഉളിയ്ക്കുന്ന മനോവികാരങ്ങളുടെ നിരഗ്ഗള മായ ബഹിഗ്ഗളനമാണു് കവിത എന്നു് വേർഡ് സ്വത്തും; ഉൽക്കൃഷ്ട മായ ഹൃമയത്തിൽ ഉൽക്കൃഷ്യമായ സന്ദര്ക്തിൽ ഉളവാകുന്ന ഉൽക്കൃഷ്ട മായ മനോഭാവമാണു് കവിതയായിത്തീരുന്നതെന്നു് ഷെല്ലിയും പറ കവിതയെപ്പററി കലെഹണ്ട് എന്ന മഹാൻ, സത്വത്തേയും, സൌന്ദയ്യത്തേയും പ്രകാശിപ്പിക്കുന്നതിനാലുള്ള വികാരത്തിന്റെറ ബഹി സ്പരണമാണെന്നും; ഹാസിലിററ് എന്ന വിദചാൻ അതു് ഭാവത്തിൻേറ യും, ഭാവനയുടേയും ഭാഷയാണെന്നും സിക്യാന്തിയ്യൂറ്റുന്നു. വിഭധാണ്ഡജ ദശ്നോത്ഥഃ ശ്ലോകത്വമാ പഭ്വത യസ്വശോഭഃ" എന്ത് മഹാകവി കാളിഭാസൻ പറഞ്ഞിട്ടുള്ള ഇ് കവിതയുടെ വികാരമയതച ത്തെത്തന്നെയാണ് ലക്ഷീകരിയ്ക്കുന്നതു്. സാഹിത്വപാരാവാര പാരീ ണന്മാരും, വിശാലചിത്തനാരുമായ കവിക**ംക്ക് പ്രകൃതിയിൽനിന്നും** ജീവിതത്തിൽനിന്നമുണ്ടാവുന്ന അനഭവങ്ങൾ അവരിൽ ശക്തിമത്തു ക്കളായ മനോവികാരങ്ങളെ ജനിപ്പിയ്ക്കുമ്പോഗ അതുകഗം അവരുടെ അന്തഭാഗത്ത് തുെങ്ങാതെ വാകൃത്രപത്തിൽ പുറപ്പെടുമ്പോഴാണു് കവിതയുണ്ടാവുന്നതു്. അതുതനൊയാണു് ഹുദയസിരകളെ തട്ടിയിള ക്കുന്ന സരസ്വതീപ്രവാഹവും. കവി തൻെറ തൂലികയെ സ്വന്തം ജീവിതരക്കത്തിൽ മുക്കിയെഴുതുന്നതാണു് കവിതയെന്നുണ്ടെങ്കിൽ അതു് വികാരമയമായിരിയ്ക്കാതെ തരമില്ലെന്നുള്ളതു ത്വീച്ച്യയാണു്. ഏതൊരു കവിതയിലാണോ വിചാരസംവലിതമായ വികാരം, അല്ലെ ങ്കിൽ ഭാവനാശിഷ്പമായ ഭാവം സ്പുടതയോടുകൂടി സ്പുരിക്കാതിരിയും,ന്നതു് ആ കവിത ഒരു യഥാത്ഥകവിതയാണെന്നു പറയുവാൻ പാടുള്ളതല്ല. നീരസമായ കാവ്വും നിച്ചജീവമായ ശരീരംപോലെ ഹേയമായിട്ടുള്ളതാ ണെന്നു പറയുന്ന ആലങ്കാരികന്മാരുടെ ആശയവും ഇതുതന്നെയാണു്.

കവിഹൃദയത്തിലുത്ഥാനംചെയ്യുന്ന എല്ലാവികാരങ്ങളും, എ ല്ലാസമയങ്ങളിലും, കുവിതയ്ക്ക് കാരണങ്ങളായിത്തീരുന്നതല്ല. തിയിൽനിന്നോ മനഷ്വജീവിതത്തിൽനിന്നോ കവികഠംക്കുണ്ടാവുന്ന അനഭവങ്ങൾ എത്രതന്നെ ഗരീചസ്സകളായിരുന്നാലും, ആ അനഭവ ങ്ങൾം ഉളവാകുന്ന ഭാവവികാരങ്ങൾം എത്രതന്നെ ഊജ്ജസചലങ്ങളാ യിരുന്നാലും, അതുകഠം സാധാരണജനങ്ങളുടെ തോതിൽനിന്ന് കവി ഞ്ഞു നില്ലുന്ന ഉൽക്കൃഷ്ടങ്ങളായ ആശയങ്ങളെ കവിഹൃദയത്തിൽ ഉ ഭിപ്പിയ്ക്കാത്തവക്ഷം യഥാത്ഥകവിതയായിത്തീരുന്നതല്ല. മായും വിശചജനീനമായുമുള്ള വസ്തുക്കളേയും, പ്രപഞ്ചത്തിലു**ണ്ടാവുന്ന** സംഭവങ്ങളേയും സാധാരണന്മാക്ക് സാധിയ്ക്കാത്തനിലയിൽ ദശിയ്ക വാനം, അവയിൽ ഒളിഞ്ഞൂകിടക്കുന്ന സൂക്ഷ്മതതചങ്ങളെ കണ്ടുപിടിയ്ക്ക വാനം ഇടയാക്കിത്തിക്കുന്ന ഒരസാധാരണശക്തിവിശേഷം യഥാത്ഥക വികഗം,കെല്ലാം ഉണ്ടായിരിയ്യൂന്നതാണു്. ആ അസാധാരണഭശന ശക്തി എപ്പോാം പ്രബുഖാമായിത്തീന്ന് പ്രതിഭാസിയ്യു, നുവോ **അ** പ്പോരം അവർ കാണുന്നതെല്ലാം നവനവങ്ങളായും വിശേഷാത്ഥഗഭ് ങ്ങളായും അവക്ക് തോന്നുന്നതായിരിയ്ക്കും. ആ നിലയിൽ **അ**വർ വണ്ണിയ്ക്കുന്നതാണം' യഥാത്ഥകവിത. ഇതാണു് കവിതയുടെ ജീവിത അതാണു് കവികളുടെ ലോകവൃാഖൃാനം; അതാണു് ക വിക്ഷം സ്രഷ്ട്രിയ്ക്കുന്ന സന്ദരലോകം.

ഇപ്പറഞ്ഞ അസാധാരണദശനശക്കിയാവുന്ന ഭിവ്വപക്ഷവും വിരുത്തിക്കൊണ്ടു് കവിയുടെ ആത്മാവു്, നിത്വഭാസചരമായ നക്ഷത്രമ ണ്ഡലത്തിലും, ഉജ്ജചലകാന്തി ചിന്നുന്ന ഉഭയാഭ്രിശ്രാഗത്തിലും, അനന്ത ശോഭാശബളമായ അസ്തമനപർവ്വതസാനുവിലും, സ്വതന്ത്രമായി പാ ടിപ്പറന്നു നടക്കുന്നു. തീവ്രമായ ജീവിതമത്സരത്തിലെ ബഹുലമായ ബഹളത്തിൽനിന്നും പുറപ്പെടുന്ന മുസ്സഹമായ അപസ്വരത്തിനിടയിലും കവിയുടെ മധുരമായ ആ ആത്മസംഗീതം എല്ലാററിന്നും ഉപരി ഉയന്നു നില്ലുന്നു. കവിയുടെ ആ ആത്മസംഗീതത്തിൽക്രുടെയാണു് നാം നമുക്ക് നേരിട്ടു കേഠംക്കുവാൻ കഴിയാത്ത നാദബ്രഹ്മസംഗീതംകേട്ടു രസിയ്യും ന്നതു്.

നമ്മുടെ നഗ്നദ്രഷ്ട്രിയ്ക്ക് ഗോചരമായിത്തിരാത്ത സൌന്ദയ്്വാം ഗാംഭീയ്്വവും പ്രകൃതിയ്ക്കുള്ള പ്രതിഭാസങ്ങളിൽ നമുക്ക് കാണിച്ചുതരുന്ന കവിയുടെ മേൽപറഞ്ഞ ശക്തിവിശേഷത്തെ ഭാവനാശക്തിയെന്നു പറയുന്നു. ശുക്തിയിൽ വീഴുന്ന നവാംബുബിന്റുക്കഠം മനോഹരങ്ങളായ മുക്താമണികളായി പരിലസിയ്ക്കുന്നതുപോലെയും, വേണുവിൽ പ്രവേശിയ്ക്കുന്ന കേവലശബ്ദം മോഹനമായ സംഗീതനാഭമായിത്തീരുന്നു ഇപോലെയും, ഭാവനാശക്തിയിൽ പ്രതിഫലിയ്ക്കുന്ന കവിയുടെ വിചാരങ്ങഠം കമനീയമായ കവിതയായിച്ചുമയുന്നു.

കവികഠം ലോകത്തെ അവലോകനംചെയ്യുന്നതും, ലോകം അവരുടെ ദൃഷ്ടികഠംക്ക് ഗോചരീഭവിയ്യുന്നതും, ഒരേപ്രകാരത്തിലല്ലാ ത്തതിനാൽ അവരുടെ ഭാവനാശക്തി വ്വാപരിയ്ക്കുന്നതും, അവർ ലോ കത്തെ വണ്ണിക്കുന്നതും ഒരേപ്രകാരത്തിലല്ല. ഓരോകാലത്തും ഓരോ ദേശത്തും ഉണ്ടായിട്ടുള്ള മഹാകവികളുടെ കവനങ്ങളിൽ ഭാവനാശക്തി യുടെ വ്വാപാരം ഓരോപ്രകാരത്തിൽ കാണുന്നതനുസരിച്ച് പല കാ വൃനിരുപകനാരം അതിന്ത് പലേപ്രകാരത്തിലുള്ള വ്യാഖ്യാനങ്ങൾ മഹാശയന്മാരായ കവികഠം തങ്ങളുടെ ആതമാ കൊടുത്തിട്ടണ്ടു്. ക്കളെ അന്വന്മാരുടെ ജീവിതാനഭവങ്ങളിലേയ്ക്ക് പ്രക്ഷേപിച്ച് അവ അടെ ആത്മാക്കളുമായി ഐക്വം പ്രാപിയ്ക്കുവാൻ ശക്തരായിത്തീരു ന്നത് ഏതൊന്നിൻെറ വൈഭവത്താലാണോ ആ ശക്തിവിശേഷമാ ണം ഭാവന. കവികഗംക്പ് ചോകത്തിൽനിന്നുണ്ടാവുന്ന അനുഭവങ്ങളി ലുളവാകുന്ന തന്മയിഭാവം ഇപ്പറഞ്ഞ ഭാവനാശക്തിയുടെ ഒരു മുഖ്വഭാ ധമ്മബോധമുള്ള മഹാനഭാവന്മാരിലെല്ലാം എറക്കുറെ ഗമാകുന്നു.

ഈ ശക്തിവിശേഷം ഉണ്ടായിരിയ്ക്കുമെങ്കിലും ക്രാന്തദശികളായ യഥാ ത്ഥകവികളെ ദശിയ്ക്കുമ്പോഗം മാത്രമേ ഇതു് സ്വഷ്ടിശക്തിയായി പ്രത്യ വള്ള ത്തോളിനെറ "വെടികൊണ്ട പക്ഷി"യും, ക്ഷപ്പെടുന്നുള്ള. <u>ഉള്ളൂ</u> രിഹൻറ "എൻെറ സചപ്പ"വും, ആശാൻെറ "വീണപൂവു"ം മേൽ വിവരിച്ചവിധത്തിലുള്ള ധാമ്മികമായ ഭാവനാശക്തിയുടെ വ്വാപാര ത്തിന്ന് നിദശനങ്ങളായിട്ടുള്ള കൃതികളാകുന്നു. ബുദ്ധിയുടെ സാമീപൃ ത്തോടുകൂടി വ്വാപരിയ്ക്കുന്ന ഭാവനയിൽനിന്നു് പുറപ്പെടുന്ന കവിത വിചാരപ്രധാനമായും, എഭയത്തിന്റെ സാരഥ്വത്തോടുകൂടി ഭാവന യിൽനിന്നു് നിഗ്ഗ്മിയ്ക്കുന്ന കവിത വികാരപ്രധാനമായും ഇരിയ്ക്കുന്ന താണു്. വർണ്വവിഷയങ്ങളെ അതാതിന്റെ പരിസരാവസ്ഥകഠംക്കു് അനത്രപമായ രൂപത്തിൽ ദശിയ്യൂകയു, അവയ്യൂ് അനത്രപമായ ഇണവും നിറവും കല്പിയ്ക്കുകയും ചെയ്യുന്ന കവിശക്തിയും ഒരുതരം ഭാവനയാണെന്നു് പറയപ്പെടുന്നു. വർണ്വവസ്തുക്കളുടെ സ്വഭാവമന സമിച്ചുളവാകുന്ന ഏതേതുമനോഭാവങ്ങളോടുകൂടി കുവി അവയെ അവ ലോകനംചെയ്യുന്നുവോ, അതാതു മനോഭാവങ്ങളുടെ രൂപവും നിറവും അവയ്ക്ക് നൽകുകയെന്നതാണു് ഈ ഭാവനാശക്തിയുടെ വ്വാപാരം. ഇതിൻെറ വൈഭവത്താൽ വർണ്വവിഷയങ്ങ**ം** വണ്ണനാകത്താവി<mark>ൻെറ</mark> മനോഭാവത്തിൽ **ചില വൈചിത്വൃജ്ങ**റം വരുത്തുന്നപോലെ, വണ്ണനാ കത്താവിൻെറ മനോഭാവം വർണ്വവിഷയങ്ങളിനേലും ചില ചായപ്പ ണികാം നടത്തുന്നുണ്ട്. നോക്കുക:----

> "നീലക്കാർവണ്ണൻറെ പഞ്ചിരി പാൽക്ക്യ-മ്പോലും തിരുമുഖം ധ്വാനിയ്ക്കയും, വീരനാപ്പാൽവെണ്ണക്കുള്ള നെഞ്ജെന്നു പേ-ത്താരാഞ്ഞുകൊഠംകയും ചെയ്യുംപോലെ, നേത്രമിമച്ചു മിഴിയ്യ്ക്കുന്നു ഭോഹന-പാത്രത്തിൻവക്കത്തി പ്രാൽപ്പതകഠം "

അമ്പാടിയിൽ ച്ചെല്ലുന്ന അക്രുരനെപ്പോലെ ഭക്തിഭാവാവിഷ്ഠനായിത്തീ രുന്ന കുവി തന്റെറ സങ്കല്പദ്രഷ്ട്രിയ്ക്കു മുമ്പിൽ ബാലഗോപാലനായ ഭഗ വാൻ വസിയ്യുന്ന അമ്പാടിയേയും അവിടെയുള്ള ഗോപസ്ത്രീകളേയും, ഗോക്കുളേയും, ഗോദോഹനത്തേയും പ്രതൃക്ഷത്തിലെന്നുപോലെ ദശിക്കു ന്നും. ആ സമയത്ത് പാൽക്കറക്കുന്ന പാത്രത്തിന്റെ വക്കത്ത് പററിയ പാൽപ്പതകഠം നിമിഷനേരംനിന്ന് വററിപ്പോകുന്നതുകാണുന്ന കവിക്കു് ആ പാൽപ്പാത്രങ്ങളും ബാലഗോപാലൻെറ കോമളുളിവൃത്രപം ധ്വാനി യൂം,ന്നതിന്നിടയിൽ ആ പാൽവെണ്ണക്കുള്ള ൻ എങ്ങോട്ടുപോയെന്നു് ആരാഞ്ഞുനോകുന്ന മട്ടിൽ കണ്ണിമച്ചു മിഴിയ്യും, തായിട്ടാണു് തോന്നു ന്നത്ര്. ഇവിടെ വർണ്വവസ്തുക്കരം കവിയുടെ മനസ്സിനെ ഭക്തിഭാവ ത്തിൽ ആശ്ശിയതിന്നന്സരണമായി കവി, വർണ്വങ്ങളായ പാൽപ്പത കരക്കു് ധ്വാനസ്ഥിതനായ ഭക്തൻെറെ രൂപം നൽകിയിരിയും,ന്നും.

> "സഞ്ചിതാത്ഥങ്ങളായി സന്തതം നിന്മേനിമേൽ സഞ്ചരിപ്പു വഞ്ചിക്കം സഹസ്രസംബ്വാകങ്ങരം പോതപ്രായങ്ങളാ മനൌകകരം ഭവതി തൻ പോതതല്ലജങ്ങളോ സാഗരസധമ്മിണി ആവാ, മല്ലെന്നാലെന്തിന്നവതന്നരക്കെട്ടിൽ തുബിന്ദു പ്രുളങ്കണികിങ്ങിണി നിബന്ധിപ്പു."

ഈ കവിതയിൽ ഉള്ളൂർ പെരിയാറിനെ മാതാവായി വിഭാവനംചെയ്യു ന്നതിന്നനുഗുണമായി, കവിയ്യൂം ആററിൽക്രൂടെ പോകുന്ന വഞ്ചികരം മാതുവക്ഷസ്സിൽ വിഹരിയ്യുംന്ന പിഞ്ചുപൈതങ്ങളായും, വഞ്ചികളുടെ പാശ്ചങ്ങളിൽ പൊന്തിയ നീർക്കുമിളകരം മാതാവു് ശിശുക്കളെ അണി യിച്ച പളുങ്കണിക്കിങ്ങിണികളായും തോന്നുന്നത്ര് ഈ ഭാവനാശക്തിയുടെ വ്യാപാരംകൊണ്ടാകുന്നു. ഇതുപോലെത്തന്നെ ശങ്കരക്കുപ്പിന്റെറ

> "സ്റ്റേരമാ മാച്ചുഖം ചന്ദ്രികാ സന്ദ്രര-നീരഭമെന്നു ഞാൻ ചിന്തിയ്ക്കുന്നു അല്ലായ്ക്കിലെൻതനു നീലക്കടമ്പിന്മേ-ലല്ലാസിരോമാഞ്ചമൊട്ടുണ്ടാമോ? മാധവവേണുവിൻ മോഹനനിസ്ഥനം മാധ്യയ്യമാളുന്ന മല്വമാവാം; നാലഞ്ചുതുള്ളിയേ കാതാസ്ഥലിച്ചുള്ള, കാലടി മന്നിലുറയ്ക്കാതായി.

തുമഞ്ഞു തുള്ളിയായ് ത്തീന്നിരുന്നാകിൽ ഞാ-നാമണിവണ്ണൻെറ പാദന്വ്യാസം നെഞ്ചിലോററാനന്ദതുന്ദിലം പഞ്ചിരി തഞ്ചിമരിച്ചേനേ നിത്വതുപ്പു."

കവിയുടെ ഓരോ രക്തബിന്ദുക്കളിലും ആ പീതാംബരൻെറ സ്മരണ ഓരോ വികാരകുസുമങ്ങളെ വികസിപ്പിയ്യൂന്നു.

> "കരുതരുതുരുതി കാൺകിലും സ്ഥിരശുഭയാണിഹ ലീലയെന്നനാം പരമരുചിരമാ മഹമ്മുഖം ചരമധരോപരി കാദുനിൽക്കവേ."

എന്നിങ്ങിനെ ആശാൻ ലീലയുടെ സൌഭാഗ്വലക്ഷ്മി ആസന്നമായ ആപത്തിൻെറ നിഴലിൽപ്പെടുകയാൽ അണയാൻപോകുന്ന ഭീപം പോലെയാണിരിയ്ക്കുന്നതെന്ന സംഗതി മേഘാവ്വതമായ ഉഷഃശ്രീയുടെ ഉപമകൊണ്ട് ഭംഗിയായി വെളിപ്പെടുത്തിയിരിയ്യ്കുന്നു. സമ്പത്തിൻറ മിന്നിച്ചയ്യ്ക്ക് ചുററും ആപത്തിൻെറ കരിനിഴലുണ്ടെന്ന നിരക്ഷരമായ പ്രകൃതിസന്ദേശം നമുക്കറിഞ്ഞുകൂടാ. പ്രകൃതിയുടെ സന്ദേശവാഹക നായ കവി നമുക്കറിയുന്ന ഭാഷയിൽ അതിനെ ഉദീരണംചെയ്യുമ്പോറം മാത്രമേ നമ്മളത്ക് മനസ്സിലാക്കുന്നുള്ള. മഹാകവി വള്ളത്തോറം "തുലാരിൽ തുലാൻ" എന്ന കവിതയിൽ,

> "ആലയമതുകിനാവിങ്കലും നിനയാത്ത കാലഭോഷത്തിൻ ജ്ചാലാപാളിയാൽ മുടപ്പെട്ട ആപത്തിൻതളിർ പ്പട്ടമേലാപ്പിൻ വുവട്ടിൽത്താ-നാണല്ലോ സുവിത്രമം കൊഠംവതീലോകം മുററും."

എന്നിങ്ങിനെ ആളുകാം അകത്തു കിടന്നാറങ്ങുന്ന വീടിന്ന് തീപിടി ച്ചതിനെപ്പററി പ്രറയുമ്പോാം ആ വിശേഷസംഭവത്തെ സമ്പത്ത് എപ്പോഴം ആവത്തിന്റെ വലയത്തിന്നുള്ളിലാണു് വത്തിയ്ക്കുന്നതെ ന്നുള്ള സാമാന്വസംഗതികൊണ്ട് വിശദീകരിച്ചതുവഴിയായി വെളിപ്പെ ടുന്നു. അഗ്നിയ്യും, ആവത്തിന്നം, അഗ്നിച്ചാലയ്യും പട്ടുമേലാപ്പിന്നും തമ്മിലുള്ള സാദ്ദശ്വസംബന്ധം ആ സാമാന്വവിശേഷത്തെ സുന്ദര ശ്രപത്തിൽ സ്ഥാപിയ്യും,ന്നതിന്നു കവിയ്യും സാധിച്ചിട്ടുണ്ടു്. വിഷയരിത്വാളികഠം, പ്രതിപാളനം, വണ്ണനാസമ്പ്രഭായം, സ ക്കല്പനം മുതലായവയിൽ, പ്രാചീനകവിതാരീതിയിൽനിന്ത് എത്രയോ വിഭിന്നമായ ഒന്നാണ് ആധുനികപ്രസ്ഥാനം. ജീവിതോളേശത്തെ സാ ധിയ്യുന്നതിന്നം, ചിത്തത്തിന്ത് വിസ്തതിയേയും, ഉല്ലംഷ്ത്തേയും ഉളവാ ക്കുന്നതിന്ന് പയ്യാപ്തമായ കാവ്യങ്ങഠം കറച്ചുകാലം മുമ്പുവരെ അത്ര സുലഭങ്ങളായിരുന്നില്ല. ആശാൻറെ ദ്രയ്യിയും, "വീണപൂവ്" വിഷ യമായതോടുകൂടി തത്വചിന്താപരമായ ഒരു നവീനകാവ്യാപ്രസ്ഥാനം കൈരളിയും, ലബ്യമായി. അദ്ദേഹത്തിൻറെ നളിനി, ലീല, പ്രരോ ഒനം, കരുണ എന്നീ കൃതികളെല്ലാം തന്നെ ജീവിതത്ത്വചിന്തയാകുന്ന ഒരേ ആളശ്ത്തിൻറെ—ഒരേ വിശിഷ്ടഭാവത്തിൻറെ വിവിധപ്രതിഫ ലനങ്ങളാണ്.

> "ഹാ! പുഷ്പമേ, അധിക തുംഗപഭത്തിലെത്ര ശോഭിച്ചിരുന്നിതൊരു രാജ്ഞികണക്കയേ നീ ശ്രീ ഭ്രവിലസ്ഥിര-അസംശയം-ഇന്നു നിൻെറ-യാഭ്രതിയെങ്ങു, പുനരെങ്ങു കിടുപ്പിതോത്താൽ!"

കവിയുടെ എടയം സ്പശിച്ചു പുറപ്പെട്ടതുതന്നെയാണിത്ര്. ലൌകിക മായ സുഖസൌകമായ്യങ്ങൾം, ക്ഷണികങ്ങളാകയാൽ ലോകത്തിൻെറ മായാവിഭ്രമങ്ങളിൽ ഭ്രമിയ്ക്കുരുതെന്നും ഈ പൂവിൻെറ സ്ഥിതിതന്നെ യാണ് അടുത്തഭാവിയിൽ തനിയ്ക്കുമുണ്ടാവാൻ പോകുന്നതെന്നും മറവ മുള്ള വിചാരങ്ങളാൽ വായനക്കാരൻ വാട്രയവും ഇളകിവശാകുന്നു. കൃതിമതയോ, അലങ്കാരപ്പകിട്ടോ, യാതൊന്നും ഇതിലില്ല. മംഗളാച രണനിയമങ്ങളും ആചരിച്ചിട്ടില്ല. പുരാണപ്രസിഭ്ധമായ ഇതിവൃത്തവു

"ഉൽപന്നമായതു് നശിയ്ക്കും, അണുക്കാം നില്ലും, ഉൽപന്നമാമുടൽവെടിഞ്ഞൊരുടേഹി വീണ്ടും ഉൽപത്തി കമ്മഗതിപോലെവരും ജഗത്തിൽ കല്പിച്ചിടുന്നിവിടെയിങ്ങിനെ യാഗമങ്ങാം." "കണ്ണേ മടങ്ങുക, കരിഞ്ഞു മലിഞ്ഞുമാതും-

മണ്ണാകമീമലരു വിസ്തുതമാകമിപ്പോഗം KU എണ്ണീടുകാക്കു മിതുതാൻഗതി, സാദ്ധ്വംമെത്തു കണ്ണീരിനാൽ? അവനി വാഴ്വ കിനാവുകഷ്യം!"

ഇങ്ങിനെ സരസമായി തത്വവഷ്ണം ചെയ്യുന്ന കവി പ്രകൃതിസൌന്ദയ്യ ത്തിൻെറ മാഹാത്മ്വത്തെ വിസ്മരിയ്ക്കുന്നില്ല. കവിയ്ക്ക് ഭാവനാശ ക്തിയുണ്ടായാൽ എന്തു വൈചിത്വംതന്നെ വരുത്തിക്രൂടാ? "കടിയാ ന്മാരുടെ പ്രാത്ഥന" എന്ന കവിതയിൽ വള്ളത്തോരം പറയുന്നതു നോക്കുക:—

> "ചിന്തിതഫലമെന്തു മേകുവാൻകഴിവുള്ള നിന്തിരുവടിയല്പം പ്രസാദിച്ചരുളുകിൽ പാഴ്മരം മരതകച്ചെണ്ടുകഠം ചൂടീടുന്നു കോമളത്തങ്കുത്തുണ്ടായ് മാറുന്നു പുല്ലിൻകൊടി."

ഇലകൊഴിഞ്ഞു് ശൂന്വശിസ്സോയി തീരുന്ന മരം ഭൂദേവിയുടെ പ്രസാദ ത്താൽ പുതുചില്ലികഠം പൊട്ടിത്തഴച്ചു് പച്ചപിടിയ്ക്കുന്നതിനെ മരത കുള്ചെണ്ടുകഠം ചൂടുന്നതായും പൽച്ചെടികഠം പഴുത്ത് മഞ്ഞക്കതിരുക കുളോടുകൂടി നില്ലൂന്നതിനെ കോമളത്തങ്കുത്തണ്ടുകളായി പരിണമിയ്ക്കു ന്നതായും കുണ്ടു രസിയ്ക്കുന്നതിന്ന് സൌന്ദ്യ്പ്പോധസമ്പന്നമായ ഒരു ഭാവനാശക്തി ഉണ്ടായേ കഴിയു.

മറെറാരു വിശേഷമുള്ള തു്, മിതമായ വണ്ണനവും, അലങ്കാരെ ചിത്വവുമാകുന്നു. വസ്ത്രസൌന്ദന്റ്വത്തെ പ്രകടീകരിച്ച് ക്കുന്നതിന്നും ജിവിതതത്വക്കുളെ സ്റ്റടതരമാക്കുന്നതിന്നും തുദ്വാരാ കാവ്വത്തിന്ന് ശോ ഭാതിശയം ഉളവാക്കുന്നതിന്നും ആവശ്യമായ അലങ്കാരങ്ങളെ മാത്രമേ ഇന്നത്തെ കവികാം സചീകരിച്ചു കാണുന്നുള്ള. ആശാൻെറ നളിനിയിലെ......"അത്ഭുതാംഗിയുടെ ചന്ദ്രനോ യതി", എന്ന ഏററവും ചെറിയ ആ വാക്വം വിസ്തതമായ ഭാവങ്ങളെ ചിത്രീകരിയ്ക്കുന്നു.

കലാവിട്ടു അനുകരിയ്ക്കുന്നതായി പറയപ്പെടുന്ന പ്രകൃതി, മനുഷ്യപ്പകൃതിയോ, ബാഹൃപ്രകൃതിയോ അല്ലെങ്കിൽ രണ്ടുംകൂടിയതോ ആവാം. രണ്ടിലും രസിയ്യപ്പാനുള്ള പ്രേരണാശക്തി നമുക്ക് നൈസ ഗ്ഗികമാണ്. മനുഷ്യപ്രകൃതിയെ വണ്ണിക്കുന്നതായാൽ, മുഷ്യസ്വഭാവം, സൽസ്വഭാവം എന്നിവയെ സ്പപ്പുമാക്കി ആദ്യത്തേതിനെ വെറുക്ക

വാനം, രണ്ടാമത്തേതിനെ അനകരിയ്ക്കുവാനം തോന്നിയ്ലേണ്ടത് വൃക്ഷലതാദികഠം, പക്ഷിമൃഗാദികഠം, ആകാശം, കവിധമ്മമാണു്. സമുദ്രം, പവ്വതം, നടി മുതലായവയെല്ലാം അടങ്ങിയവയാണു് ബാഹൃ പ്രകൃതി എന്നു പറയുന്നത്ല്. ഇതും കാവ്യത്തിന്നു വിഷയമായി സ്ഥി കരിയ്ക്കാറുണ്ടു്. സംസ്താരത്തിന്റെ പ്രാരംഭദശയിൽ അവ മനുഷ്വന്റെറ നിത്വജീവിതത്തിന്ന് ഏ**യ്യ വിധത്തിൽ ഉപകരിയ്ക്കുന്ന എന്ന നില** യിൽ നിന്നുകൊണ്ടാണു് കവികഗം അവയെ വണ്ണിച്ചിരുന്നതു്. ന്നീടവർ കേവലമനോഹരിത്വത്തെ പാടുവാൻ ആരംഭിച്ചു. ക്രമേണ പ്രകൃതിവണ്ണനയും സങ്കേതങ്ങൾം സ്ഥലം പിടിച്ചു തുടങ്ങിയതോടുകൂടി കവികഠം കണ്ണടച്ചുകൊണ്ട് വണ്ണനകളം തുടങ്ങി. പുവ്വീകനാരായ കവികഠം പ്രകൃതിവണ്ണനമെന്നത്ര് ചമൽക്കാരമുണ്ടാക്കുവാനുള്ള ഒരു സന്ദഭം മാത്രമായിട്ടേ അവർ കരുതിയിരുന്നുള്ള. പ്രകൃതിവണ്ണനമാ കുന്ന **ചരടിൽ ഉ**ല്ലേഖരത്നങ്ങ**ാം കോ<u>ത്ത്</u> മനോഹരങ്ങളായ** കാവ്വ്വമാ ലക**ാം ഉണ്ടാ**ക്കുവാനാണ് അവർ ഉദ്വമിച്ചത്. ഇന്നത്തെ കവികളാ കട്ടെ പ്രകൃതിയുടെ സമസ്തവ്വാപാരങ്ങഠാക്കും മനുഷ്വസഹജമായ ഭാവ ങ്ങളേയും വികാരങ്ങളേയും കല്പിച്ച് അനുവാചകഹുദയത്തെ വിചാര പര മ്പരയിലേയ്ക്ക് കടത്തിവിടുകയാണു് ചെയ്യുന്നതു്. സ്തോഭജനകതചം, ചിത്രനിച്മാണശക്തി എന്നി ധമ്മങ്ങളുടെ സമുച്ചയ മാണാ് കവിത എന്ന സിധാന്തം തികച്ചും പ്രയോജിതമായിട്ടുള്ള തു **ആധു**നികകാവ്വപ്രസ്ഥാനത്തിലാണെന്നു പറവാൻ **ആരു**ം മടിയ്ക്കുക യില്ല. വള്ള ത്തോളിന്റെറ:---

"താരാ പുഷ്പങ്ങാം ചിന്തി പ്രലപറവകാം തൻ കൊഞ്ചലാൽ സ്തോത്രമോതി സ്പാരാകാശചെരാതിൽ അരുണദിനകര പ്പൊൻവിളക്കും കൊളുത്തി ആരാഗ ക്കാവിവസ്ത്രത്തോടു വിചസുമുഷ-സ്സസ്വ്വ യാരെപ്പിഴയ്യോ-താരാധിയ്ക്കുന്നു നമ്മാരംക്കുണർവരുളുണമ-സ്സവ്വ്ലോകൈകനാഥൻം ഉഷസ്സിനെ ആരാധകഭാവത്തിൽ സങ്കല്പിച്ച് പ്രഭാതപ്രകൃതിയുടെ സൌഭാഗ്വത്തേയും, പ്രകൃതിച്ചിലൂടെ ദൃശ്വമാകുന്ന ഈശചരമാഹാത്മ്വു ത്തേയും പ്രസ്പപ്പുമ്മാക്കുന്ന ഒന്നാണല്ലോ ഈ പട്വും. മനോഹരമായ ശച്ചാഗുണംകൊണ്ട് ഛന്ദോരൂപത്തെ സംഗീതമധുരമാക്കുന്നു എന്നു ഉള്ള മമാണ് ഇതിലെ മറെറാരുഗുണം. വായനക്കാരിലേയ്ക്കു പക രുന്ന കവിയുടെ വികാരം മഹത്തായ ഒന്നല്ലെങ്കിൽ അതിന്ന് ചമൽ ക്കാരം മതിയാവുകയില്ലെന്ന് പറയേണ്ടതില്ലല്ലോ. പരമാത്ഥവസ്തു ചിന്തചിൽനിന്നും പുറപ്പെടുന്ന പരിശുദ്ധങ്ങളായ ആശയങ്ങളുടെ പ്ര വാഹത്തിൽ കവിയുടെ ഹൃദയവും ഏറക്കുറെ തന്നയത്വമുള്ള തായിരി യൂംണം. നാലപ്പാടൻ പറയുന്നതു നോക്കുക:—

ആ ഞങ്ങൾം തന്നേകമനോരഥക്ക്ര-മ്പാകസ്ഥലീരംഗമലങ്കരിയ്ക്കെ അതിൻ പൂങ്കവിളെത്രയെത്ര മൂകൻ ഞാനെൻെ മനോമുഖത്താൽ."

കവിതയെസ്സംബന്ധിച്ചേടത്തോളം ഭാവനാശക്തിയുടെ വ്വാപാരത്തിൽ അലങ്കാരവും വൃത്തവും സ്വയമേവ വന്നുചേരുന്നതാണും.

> "ഒരല്ലലില്ലെങ്കിലെനിയ്ക്കു കല്ലാ-യിരിയ്ക്കുവാനാണിനിമേലിലിഷ്ലാം മരിച്ചിടും മത്തൃതയെന്തിനാണ് കരഞ്ഞിടാന്തം കരയിച്ചിടാന്തം."

കവിതയുടെ വൃത്തം കവിയുടെ അന്തരംഗത്തിൽ നിഗ്ര**ഢമാ**യിട്ടുള്ള ആത്മസംഗീതത്തിൻെറ ഒരു ബഹിസ്സരണമാണെന്ന് ഈ പദ്വ്വം തെ ളിയിയ്ക്കുന്നുണ്ട്.

ഇയ്യിടെയായിട്ട് മലയാളസാഹിതൃകാരന്മാർ അവരുടെ ശ്ര ധേയെ തങ്ങളുടെ ചുറദുപാടും കിടന്നു് കഷ്യപ്പെടുന്ന സാധുസഹോഭര ജെളിലേയ്ക്കു തിരിച്ച് അവരുടെ ജീവിതത്തെ ചിത്രീകരിയ്ക്കുവാൻ മുതിൻ കാണുന്നതു് സാഹിത്വാളിവ്വദ്ധിയുടെ ഒരു സൂചകമാണു്.

കേരളവും സംഗീതവും

By K. PARVATHI AMMA, HEAD OF THE MUSIC DEPARTMENT, COCHIN EDUCATIONAL SERVICE.

രാജാ സർ അണ്ണാമലച്ചെട്ടിയാരവർകളുടെ ഷഷ്ട്വുബ്ലപ്പത്തി പ്രമാണിച്ചു പ്രസിലാപ്പെടുത്തുന്ന സ്റ്റാരകാവലിയിലേക്ക് 'കേരളസംഗീ ത'ത്തെ കറിച്ച്' ഒരു ലേഖനം കിട്ടിയാൽ കൊള്ളാമെന്നുള്ള തൽഭാര വാഹികളുടെ കത്തു് എനിക്ക് എന്തെന്നില്ലാത്ത ഒരു അനുഗ്രഹംപോ ലെയാണ് തോന്നിയത്. സംഗീതകലയുടെ പോഷണാത്ഥാ എത്രയും പരിശ്രമിച്ചിട്ടുള്ള ഒരു മാന്വന്റെ—ജനങ്ങളുടെ അജ്ഞതകൊണ്ടും അ നാഭരവുകൊണ്ടും ക്രമേണ ക്ഷയിച്ചു ക്ഷയിച്ചു നാശഗത്തത്തിന്റെറ വക്കത്തെത്തിയിരുന്ന കണ്ണാടകസംഗീതം പുന്നു ഒലയിച്ചുവനായി അ വതരിച്ച ആ പുണ്യപുരുഷന്റെ, പാഭാരവിന്ദുങ്ങളിൽ ഈ ശുരസന്ദര് ഭത്തിൽ ഒരു വാടിയ പുഷ്പമെങ്കിലും അച്ചിക്കുവാൻ സാധിക്കുന്നതിൽ കവിഞ്ഞ എന്തൊരു അനുഗ്രഹമാണ് എന്നെപ്പോലെയുള്ള സംഗീത പ്രണയികഠംക്കു കിട്ടുവാനുള്ള ത്ര്!

സംഗീതം മററു കലകളെപ്പോലെ മനുഷ്യനിമ്മിതമായ ഒന്ന ല്ല. നേരെമറിച്ചു മനുഷ്യസ്രഷ്ഠിക്ക് എത്രയോ മുമ്പുതന്നെ സംഗീതം ഉണ്ടായിരുന്നു എന്നാണ് പാശ്ചാത്വരും പെയന്ത്വരുമായ ശാസ്ത്ര ജ്ഞന്മാരുടെ ഐകകണ്യമായ അഭിപ്രായം. നാടബ്രഹ്മാത് മകമായ ഗീതത്തിൽനിന്നാണു പ്രപഞ്ചത്തിന്റെ ഉത്ഭവമെന്നും ഏററവും പു രാതനങ്ങളാണെന്നു സ്ഥാപിച്ചിട്ടുള്ള ഗാനരൂപങ്ങളായ വേടങ്ങളിൽ വെച്ചു ആഭിമവേടമായ സാമവേടത്തിന്റെ ഒരു ഉപഭാഗമാണു് സം ഗീതം (ഗാന്ധവ്വ്ശാസ്ത്രം) എന്നുള്ള തിൽനിന്നു സംഗീതത്തിന്റെ പഴ ക്കുത്തേയും മാഹാത്മ്വത്തേയും കുറിച്ചു നമുക്കു ഏറക്കുറെ ഉയവിക്കാവു ന്നതാണു്. പക്ഷികളുടെ കളുകൂജനം, അരുവികളുടെ ആരാപം, വൃക്ഷലതാദികളുടെ മമ്മരശബ്ദം മുതലായി പ്രകൃതിയിൽനിന്നു് ഉതി രുന്ന നിസഗ്ഗമധ്യമായ സംഗീതത്താൽ (ശബ്ദവിശേഷങ്ങളാൽ) സുര ഭിലമായ ഒരു ലോകത്തിലേക്കാണ് പ്രകൃതികത്താവു മനുഷ്യനെ സ്ലാ ക്ലിച്ച് അയച്ചിട്ടുള്ളത്ത്. സംഗീതത്തിന്റെ വശീകരണശക്തിക്ക് മ നുഷ്യൻ മാത്രമല്ല, പക്ഷി മൃഗാഭിക്കാപോലും വിധേയരായിത്തീരുന്നത്ത്ര നുക്കു കണ്ടറിവുള്ള താണ്. കൃരമൃഗങ്ങളും ഘോരസപ്പിങ്ങളും മന്നു ഷൃത്രടെ പാട്ടുകഠം കേട്ടു മനം മയങ്ങി ലയംകൊണ്ടു നുത്തമാടുന്നത്തു കാണുമ്പോഠം സംഗീതത്തിന്നു മനുഷ്യലോകത്തിലെന്നുപോലെ തുല്യ പ്രഭാവമാണ് തിയ്യക്കലോകത്തിനുമെന്നു നുക്കു അനുഭവപ്പെടുന്നുണ്ടു്. വൃക്ഷലതാഭികഠം പോലും സംഗീതത്താൽ ആക്യഷ്ടങ്ങളാകമെന്നാണു സംഗീതശാസ്ത്രം ഉദ്ഘോഷിക്കുന്നത്ര്. അതുകൊണ്ടു്, മററു കലക മെപ്പോലെ സംഗീതം മനുഷ്യലോകത്തെ മാത്രമല്ല ചരാചരാത്മക മായ പ്രപഞ്ചത്തെ മുഴുവൻ സ്വശീക്കുന്നു ഒരു വിശിഷ്യകലയാണെന്നു തന്നെ വൃക്തമാകുന്നും.

മുതൊരു ഭാഷയുടേയും പ്രഥമപ്രകാശനം സംഗീതരൂപത്തിലാണ്. സാഹിത്വത്തിന്റെ (ഭാഷ) ആവിഭാവത്തിന്ന മുമ്പു വെറും ചലനവിശേഷങ്ങളോടുകൂടി ശബ്ദുശ്രവത്തിൽമാത്രം പ്രചരിച്ച സംഗീതം ഭാഷോഭയത്തിന്നശേഷം വാക്കുകളുമായി കൂടിച്ചേന്ന പാട്ടുകളുടെ ശ്രപം പൂണ്ടു ജീവിതരംഗത്തിൽ പ്രവേശിച്ചു. ഇങ്ങിനെ ആദ്യകാലത്തുണ്ടായ പാട്ടുകഠം മിക്കവാറും അക്ഷരവ്യക്തിയോ താളവ്യവസ്ഥയോ ഇല്ലാത്തവയായിരുന്നിരിക്കണം. കേരളത്തിലുണ്ടായ ആദ്യത്തെ പാട്ടു് എന്താണെന്നും എങ്ങിനെ ഉണ്ടായതാണെന്നും കേവലം മനോധമ്മത്തിന്നും അന്മമാനങ്ങഠംക്കും വിഷയമായിരിക്കുന്നു. കൃഷിപ്പണികൊണ്ടു കാലയാവനംചെയ്തിരുന്ന കേരളീയൻ കന്നുപൂട്ടി നിലം ഉഴുതിരുന്ന അവസരങ്ങളിൽ പണിക്ക് ആഹ്ലാഭവും ഉന്മേഷവും ഉണ്ടാക്കുവാൻവേണ്ടി പുറപ്പെടുവിച്ച "ഓ—ഓ—ഓ—" എന്ന കന്മകാലിപ്ര അവത്തിൽനിന്നായിരിക്കാം മലയാളത്തിലെ പാട്ടിൻെറ പുറപ്പാട്ട്. ക്രമേണ പാടത്തു പോത്തിൻറെ ചെവിയിൽ കിന്നുരം വായിച്ച കഷ് കൻ ഗ്രമാത്തിൽ കുട്ടികളെ ഉറക്കുന്നതിന്ന്

"കാക്കെ കാക്കെ കാക്കെ വാ കുട്ടീടെ കാടത്തം കാണാൻ വാ പൂച്ചെ പൂച്ചെ നീയ്യം വാ കുട്ടിടെ പുഞ്ചിരി കാണാൻ വാ."

എന്നു തുടങ്ങിയ താലോലപ്പാട്ടുകഠം പാടിത്തുടങ്ങി. ഭാഷക്ക് സാസ്താ രാ വന്നതോടുകൂടി സാഗീതസമ്പത്തും വലിച്ചുതുടങ്ങി. സാമുഭായിക ഗാനങ്ങഠം പടന്നു പിടിച്ചു. കേരളത്തിൽ സാമുഭായികഗാനങ്ങഠം എണ്ണിയാൽ ഒടുങ്ങാത്തവണ്ണം അത്ര അധികമുണ്ടു്. എന്നാൽ അവയിൽ പലതും പരമ്പരയായി പലരുടേയും സ്കൃതിപഥത്തിൽത്തന്നെ സ്ഥാനം പിടിച്ചു പോന്നതിനാൽ അവാലബത്ഥാനങ്ങളുടെ നാശങ്ങളോടുകൂടി അവയും നഷ്യപ്പെട്ടുപോയി—പലതും ഭാഷാലോകത്തിൽ നിന്നു മറഞ്ഞുപോകുന്നതിന്നു ഇനി അധികം കാലതാമസം വേണ്ടിവ രിച്ചെന്നാണ് തോന്നുന്നതു്.

സപ്പാട്ട്, ബ്രാഹ്മണിപ്പാട്ട് തുടങ്ങിയ പാട്ടുക**ം വളരെ** പ്രാചിനങ്ങളാണു്. സന്ധ്വാസമയങ്ങളിൽ കുട്ടിക**ം കളിച്ചു ഭസ്തവും** തൊട്ടു നിലവിളക്കിന്ന ചുറദുമിരുന്നു്

> "കല്ലിന്മേലും മലമേലും മുള്ളിലും തല്ലി യന്തകനെന്നെ യിഴയ്ക്കുമ്പോരം അല്ലൽ പോകുവാനായിട്ടു കാണണം തുപ്പൂണിത്തുറെ മേവും നാരായണ."

"കണ്ണനാമണ്ണിയെ കാണുമാറാകണം കാറൊളിവണ്ണനെ കാണുമാറാകണം."

എന്നു തുടങ്ങിയ സ്തോത്രങ്ങൾ അതിമധുരമായ സ്വരത്തിൽ പാടുന്ന കണ്ണം കരളം കവരുന്ന കാഴ്ച പുരാതനകാലം മുതല്ലൂതന്നെ കേരള ത്തിൽ സുലഭമായിരുന്നു. പാന, ഗാഥ, വഞ്ചിപ്പാട്ട്, കിളിപ്പാട്ട് മുത ലായവക്ക് പ്രചാരം സിദ്ധിച്ചതോടുകൂടി കേരള സംഗീതകല വളരെ പു ഷ്മിപ്പെട്ടു. "ഇരുപത്തിരണ്ടു രാഗത്തിൽ രാമായണം വായിക്കുവാൻ" അറിഞ്ഞിരുന്ന പല മുത്തശ്ശിമാരും നമ്മുടെ ഇടയിൽ ഉണ്ടായിത്തുടങ്ങി. എന്നാൽ ഇതുകൊണ്ടും അവർ തുപ്പിപ്പെട്ടില്ല. സംഗീതവാസനാനു

ഗ്രഹീതകളായ കേരളീയാംഗനകഠം വിശേഷടിവസങ്ങളിൽ കൂട്ടാകൂടി താളവും ചോടും ഒപ്പിച്ചു പാടിക്കളിക്കുവാൻ ഉതകുന്ന ഒരു പ്രസ്ഥാനം കണ്ടുപിടിച്ചു. അതാണ് കൈകൊട്ടിക്കളി. ആദ്യമായി വഞ്ചിപ്പാട്ട് കറത്തിപ്പാട്ട് മുതലായ ഗാനരീതികളെ മാത്രം അവലംബിച്ചിരുന്ന കേരളത്തിലെ ഈ കല സംഗീതത്തിന്റെ വിവിധഭാഗങ്ങളിലുള്ള ക്രമ പ്രവൃദ്ധമായ വളച്ചിയെ അനുസരിച്ചു വികാസം പ്രാപിച്ചു് ആകർഷ കമായ ഒരു സംഗീതകല എന്ന സ്ഥാനത്തിന്നുതന്നെ അർഹമായി കേരളത്തിലെ ഗാനകല പഴയ പാട്ടുകളുടെ ശുസ്വമായ പരിധിയെ വിട്ടു് ഉൽകർഷോന്മുഖമായ കഥകളിപ്രസ്ഥാനത്തിലെ ശാ സ്ത്രാനുസ്തരങ്ങളായ മനോഹരഗാനങ്ങളിലേക്കു വളവിന്വാസം ചെയ്ത തോടുകൂടി എതാദ്രശമായ ഒരു പരിണാമം കൈകൊട്ടിക്കളിക്കു "വീര വിരാട ഷമാരാ" എന്നു തുടങ്ങിയ ഗാനങ്ങൾ നോ വ**ന്നു**കൂടി. താളംകൊണ്ടും മേളാദികഠംകൊണ്ടും അതുല്യങ്ങളായ ഇത്തരം **ക്കു**ക. ഗാനങ്ങും കൈകൊട്ടിക്കളിക്കു അലങ്കാരങ്ങളായിതീന്നതോടുകൂടി കേര ളഗാനകലയിൽ ഈ പ്രസ്ഥാനത്തിന്നു അതുല്വമായ ഒരു സ്ഥാനവും ലഭിച്ചു.

ഗാനകല പഴയപാട്ടുകളുടെ പരിമിതമായ പരിധിയെ വിട്ട് നാനാമുഖമായ വികാസത്തെ പ്രാപിച്ചത്ത് കഥകളിയുടെ ആവിഭാവ തോടുകടിയാണ്. ജയദേവകൃതിക്കാ വെട്ടിത്തെളിയിച്ച വിശിഷ്ഠ വിശാലമാഗ്ഗ് ജ്ജളിൽ അനുഗമിച്ച് സംഗീതസാഹിതൃകോവിദന്മാരായ ഉണ്ണായി പ്രഭൃതിക്കാ ആട്ടക്കഥക്കു ഉപയുക്തങ്ങളായ ഉൽക്ക് ഷ്ഠാനങ്ങളെ ഉണ്ടാക്കിയതോടുകളിയാണ് കേരളസംഗിതത്തിന്റെറ സൌവണ്ണ കാലം ആരംഭിച്ചത്ത്. സാവ്വത്രികമായി പ്രകാശിക്കുന്ന ഭക്തിസോകൊണ്ടു ത്വാഗരാജസ്ഥാമികളുടെ കൃതിക്കാ നമ്മെ എത്രത്തോളം ആനന്ദി പ്രീക്കുന്നുന്നോ ചെന്നാച്ചതുള്ളം പ്രയോഗവൈചിത്ര്യത്താലുള്ള വ്യൂല്പാഭകത ആലോചിക്കാതോരം അവസാനിക്കാതെ നീണ്ടുനിണ്ടു പോകുന്ന വൃംഗ്വാത്ഥത്തിന്റെറ ബാഹുല്വം ഈ ഗ്രണങ്ങാം, താളങ്ങളുടെ പ്രയോഗ വൈചിത്രൃത്താൽ ശ്വാമശാസ്ത്രികളുടെ കൃതിക്കാ നമ്മെ എത്രത്തോളം രസിപ്പിക്കുന്നുണ്ടോ, താളങ്ങളുടെ പ്രയോഗവൈചിത്രൃത്താൽ ശ്വാമശാസ്ത്രികളുടെ കൃതിക്കാ നമ്മെ എത്രത്തോളം

ആഹ്ലാഭിപ്പിക്കുന്നുണ്ടോ അതുപോലെത്തന്നെ ഈ ഗുണങ്ങളെല്ലാം ഒരു പോലെ സമ്മേളിച്ചു കാണുന്ന ഉണ്ണായിവാരിയരുടെ കൃതികഠം കേര ളിയരെ സന്തോഷസാഗരത്തിൽ ആറാടിക്കുന്നുണ്ടു്. നളചരിതത്തെ പ്പററി മഹാമഹിമത്രീ അപ്പൻ തമ്പുരാൻ തിരുമനസ്സിൽനിന്നു ഇക്കു "ഭക്തശിരോമണിയായ തൃാഗരാജക്രതികളിൽ സാവ്വ ത്രികമായി പ്രകാശിക്കുന്ന രസഭാവങ്ങൾ ഭാഷാഗാനങ്ങളിലും കാണാ ത്തതല്ലെന്നു പറയുന്നതു സാഹസമല്ലെങ്കിൽ നമുക്കു അഭിമാനിക്കുവാൻ അവകാശമുണ്ട് ". പൂജ്വപാദനായ ഉണ്ണായിവാരിയരാണു് ഇവരിൽ പ്രഥമഗണനീയൻ. രസത്തിന്നു അനുഗുണമായ രീതി, രാഗം, താളം, ശച്ച, പാകം ഇവയെ ക്ഷീരനിരങ്ങഠംപോലെ കൂടിയോജിപ്പിച്ചു അക്ഷ രകാലവും ജീവിസചരവും മമ്മത്തിൽ കൊളുത്തി ആശയത്തിന്നു ഓജ സ്സം ഗാനശരീരത്തിന്നു പരിപുഷ്ടിയും വരുത്തുന്ന സമ്പ്രഭായം വാരിയർ നളചരിതത്തിൽ ആപാദചൂഡം ഉച്ഛ്യംഖലമായി ഉഭാഹരിച്ചിട്ട ണ്ടു്. ഉദാഹരണമായി 3-ാംഭിവസത്തെ കഥയിലെ "ഘോരവിപിന" മെന്ന പഭം നോക്കുക. ഭവനത്തിൽ വനതയും വനത്തിൽ ഗ്ലഹത്വവും നളൻ കാണുന്നതു നിവ്വേദംകൊണ്ടല്ല. തതചവിചാരത്തിൽനിന്നു മന സ്സിനുണ്ടായ ഒരു ഉറപ്പാണു്. അതുകൊണ്ടുതന്നെയാണു് വീരരസാ നുഗുണമായ കല്വാണിരാഗവും ചെമ്പടതാളവും അത്ഥഗാംഭിയ്യവും മാദ്ദ്വവും കുറഞ്ഞ ശയ്യയും ഉപയോഗിച്ചിട്ടുള്ളത്. ശാന്തശ്രംഗാര ങ്ങാം ക്കുമാത്രം അനു ഇണമായ വൈടർഭിയേയും ഭയനകത്തിന്നുകൂടി അ നുകൂലമായ ഗൌഡിയേയും വെടിഞ്ഞു പാഞ്ചാലിരീതിയെ അംഗീകരി ക്കുവാനും ഇതുതന്നെയാണു് കാരണം. ഇങ്ങിനെയുള്ള വടങ്ങളെല്ലാം <u>രെക്രുട്ടി "ഘോരവിപിന" എന്ന് അക്ഷരകാലം ഉറപ്പിച്ച്, "ഘോര"</u> എന്ന ഭാവത്തിന്നടുത്ത ജീവസചരംകൊണ്ടു് ഓജസ്സം വരുത്തി ഗാനൾ രീരത്തിന്നു പുഷ്പിവരുത്തിയിരിക്കുന്നതിന്റെ രാമണീയകം അവണ്ണനീയ മെന്നേ പറഞ്ഞുകൂടു.

സംഗീതമകരന്ദനിഷ്വന്ദികളായ മനോഹരകൃതികളെക്കൊണ്ടു കൈരളീഭേവിയെ അനുഗ്രഹിച്ചിട്ടുള്ള അപൂവ്വം ചില കവികളിൽ പ്രഥ മവും പ്രധാനവുമായ സ്ഥാനത്തെ അഹിക്കുന്ന മറെറാരു കവിയാണു് ഇരയിമ്മൻ തമ്പി. അദ്ദേഹത്തിൻറെ കീചകവധം, ഉത്തരാസ്വയം വരം, ഭക്ഷയാഗം എന്ന കൃതികഠംക്കുള്ള പ്രത്യേകത അവയിൽ വിള ജന്നേ സംഗീതലക്ഷ്മിയുടെ വിലാസമാണു്. "ഹരിണാക്ഷി", "കല്യാണീ കാഞ്ക മമ", "ശശിമചി വരിക സുശീലെ", "മാനിനിമാർമെയലി മണ്ണെ" തുടങ്ങിയ കൃതികളിൽ വിളങ്ങുന്ന സംഗീതരസം കണ്ണാടകസം ഗീതലോകത്തിലെ ഏതൊരു കവിയുടെ കൃതിയോടും കിടപിടിക്കത്ത ക്കവയാണു്.

ഇങ്ങിനെ കേരളസംഗീതം കണ്ണാടകസംഗീതകലയെ ആശ്ര യിക്കാതെ അതിൽ വന്തുകൊണ്ടിരുന്ന് പരിഷ്കാരങ്ങളെ ഗണ്വമാക്കാ തെ സ്വതന്ത്രമായ ഒരു പന്ഥാവിൽകൂടി പ്രയാണംചെയ്തുകൊണ്ടി **രുന്നം.** സചാതിതിരുനാക മഹാരാജാവിന്ന കേരളസംഗീ**തത്തെ** കണ്ണാ ടകസംഗീതവുമായി കുറച്ചുകൂടി അടുപ്പിക്കണമെന്നു തോന്നി. സംഗീത തിമുത്തികരം എന്നു അറിയപ്പെടുന്ന ത്വാഗരാജസചാമികരം, ഭീക്ഷിതർ, ശ്വാമശാസ്ത്രിക്കാ എന്നിവരും രാമനാടക്കത്താവായ അരുണാചല ക വിരായരും മററും ജീവിച്ചിരുന്ന കാലമായിരുന്ന അത്ല്. അവരുമായി അടുത്തു പെരുമാറുവാൻ ഇടയായ അദ്ദേഹം കണ്ണാടകസംഗീ**തത്തിൽ** വന്നിരുന്ന പരിഷ്ടാരങ്ങളും മററും സത്രദ്ധം മനസ്സിലാക്കി അവയിൽ ചിലതെല്ലാം സ്ഥികരിച്ചു കേരളസംഗീതകലയെ പഷ്ടിപ്പെടുത്തുന്നത അഭിലഷണിയമെന്നു അദ്ദേഹത്തിന്നു തോന്നി. അതുകൊണ്ടായിരിക്ക ണം അദ്ദേഹത്തിന്റെ സംഗീതവാസന മാമുൽപ്രിയന്മാരെപ്പോലെ കഥകളിനിമ്മാണത്തിലേക്കുതന്നെ ഉപയോഗിക്കാതെ വിശിഷ്ഠങ്ങളായ മററു മാഗ്ഗങ്ങളിൽകൂടി സൈചരസഞ്ചാരം ചെയ്തുത്ര്. ങ്ങളെ അനുകരിച്ചു ഭാഷയിൽ പടങ്ങഠം നിമ്മിക്കുന്നതു് ആശാസ്വമെ ന്നു അദ്ദേഹത്തിന്നു തോന്നി. മഹാരാഷ്ക്രരാജ്യങ്ങളിൽ പ്രചാരമുണ്ടാ യിരുന്ന ഹരികഥാപ്രസ്ഥാനത്തെ കേരളത്തിലേക്കു ഇറക്കുമതിചെയ്തു. കേരളസംഗീതത്തിന്റെ അന്നത്തെ സ്ഥിതിയെ അവധാനപൂവ്വം വിശ കലനം ചെയ്തറിഞ്ഞു ഗുണഭോഷാംശങ്ങളെ മനസ്സിലാക്കി ആയതിന്റെറ അഭ്വഭയമാർഗ്ഗങ്ങളെ നിർദ്ദേശിച്ചു് ആവശ്വമെന്നു തോന്നുന്ന ഭാഗ

ക്കുളിൽ അന്വരാഷ്ട്രങ്ങളിലെ സംഗീതരീതിയിലുള്ള ആശാസ്വക്കുളായ ഭാഗങ്ങളെ സ്വീകരിച്ചു കേരളഗാനകലയെ പഷ്ട്രിപ്പെടുത്തുന്നതിന്നാണ് അദ്ദേഹം ബദ്ധശ്രദ്ധനായത്ര്. അനന്തരം കേരളത്തിലുണ്ടായിട്ടുള്ള "സംഗീതനൈഷധം", "ഹരിശ്ചന്ദ്രചരിതം", "ദേവയാനീചരിതം" ഇവയിലെ പാടുകഠംക്കാക്കെ കണ്ണാടകരീതിയോടു കുറച്ചുകൂടി അടുപ്പ മുള്ള തായിട്ടു കാണാം.

ഈ പാട്ടുകഗംക്കാക്കെ ഓരോകാലത്തു വലിയ പ്രചാരവും ഇന്നാവട്ടെ ഒരു പുള്ളവനോ ഒരു കുറത്തിയോ കണ്ണ ഗതപ്രാണരായിട്ടു വല്ല മുക്കിലോ മൂലയിലോ കിടക്കുന്നുണ്ടെങ്കിൽത്തന്നെ **അവരെ ആരും തിരിഞ്ഞുനോക്കുന്നില്ല.** മഹാകവി വള്ള ത്തോളിന്റെറ പരിത്രമാകൊണ്ടു കഥകളിയെ പുനജ്ജീവിപ്പിക്കുവാൻ സാധിച്ചുവെ ങ്കിലും കഥകളിപ്പാട്ടുകശക്കു അതുകൊണ്ടും വലിയ മെച്ചമൊന്നും **ഉണ്ടാ** സംഗീതലോകത്തിൽ കേരളസംഗിതം എന്തുകൊണ്ടും ഉന്ന തമായ ഒരു സ്ഥാനം അഹിക്കുന്നുണ്ടെന്നുള്ള തു ഏതൊരു കേരളീയന്തം അഭിമാനകരമായ ഒരു സംഗതിയാണു്. ഈ പാട്ടുകളെ ധാരാളം പോഷിപ്പിച്ചു സന്മാഗ്ഗ്ങ്ങളിൽക്രടി വേണ്ടപോലെ നയിച്ചു മധുരസ നിഷ്യന്ദികളം അനാഘാതങ്ങളമായ നാനാവണ്ണങ്ങളിലുള്ള സുരഭില സുമനിരകളെക്കൊണ്ടു കൈരളിയെ ആരാധിക്കുവാൻ ഭാഷാഭക്തന്മാർ ഉത്സുകരാകുമാറാകുട്ടെ. ഈ പുഷ്പങ്ങൾ എന്നും വാടാമലരുകളാകുമാ അവയ്ക്കു വേണ്ട "തണലും തണ്ണിരും" തരുവാൻ രാജാ സർ അണ്ണാമലച്ചെട്ടിയാരെപ്പോലെയുള്ള ഉഭാരമതികഠം സഭാ സന്നദ്ധരാ **ഷമാറാകട്ടെ**.

അതും ഇതും

By C. N. A. RAMAYYA SASTRI, M.A., TRIVANDRUM.

"ഇരുന്നിട്ട വേണ്ടേ കാൽ നീട്ടാൻ" എന്നൊരു ചൊല്ലുണ്ട്. "ഇരിയ്ക്കുന്ന നിലയിൽ പ്രവേശിയ്ക്കുന്നു" എന്നുള്ള തിന്നു് "ഇരുന്നുകൊ ണ്ട് പ്രവേശിയ്ക്കുന്നു? എന്നുള്ള തജ്ജിമയും ഇതിനെ ഓമ്മപ്പെടുത്തുന്നു. ഇരുന്നിട്ട് കാൽ നീടുന്നതുപോലെ വാ തുറന്നിട്ടുവേണം ഉച്ചരിയ്ക്കാൻ. വാ തുറക്കുന്നതിനോട്ട് സ്വായമേ യോജിച്ച വണ്ണമാണ് 'അ'. തിൻെറ ഭീർഘം 'ആ'. വാ തുറന്നതിൽ ഇടവീതി കുറഞ്ഞുള്ള സചര വണ്ണം 'ഇ'. ഭീർഘം 'ഈ'. മദ്ധ്വഗതം പരാമർശിയ്ക്കുന്ന ഇ് 'ഉ'. മീർഘം 'ഈ'. ഇവയ്ക്ക് 'ചുട്ട്' എഴുത്ത് =ചുട്ടെഴുത്ത് ' എന്നു ദ്രാവിഡ ഐഹികത്തിൽ ദൃരകല്പമായി 'ഞണ്ടർ', 'ഉമ്പർ' എന്ന സങ്കേതം. പടങ്ങൾം ദേവപയ്യായമായി വരുന്നു. നംബർ, നമ്പർ, നമ്പ്രൂ എന്ന കണക്കിന്ന് "അണ്ടർകോൻ തനയനാശു താതസവിധത്തിൽ വന്ന സമയത്തിൽ മാം"എന്ന പാടത്തിൽ ദചിതിയാക്ഷരം പ്രയോഗിച്ചുകണ്ടി ട്ടുണ്ടെന്ന് ഇവിടെ പ്രസ്താവിച്ചുകൊള്ള ട്ടെ. പവ്വതങ്ങളിൽ പൊക്കം കുറയാത്തതിന്ന് വല്യതെന്നമാത്രം അക്ഷരാത്ഥമായ മലയെന്നം കുറ ഞ്ഞതിന്നു് കുറഞ്ഞതെന്നു് അക്ഷരാത്ഥം വ്യൂക്തമായ കുൻവു, കുന്നു് എന്നും പേരു് വന്നുതുപോലെ (സമുദ്രത്തിൽ) മറഞ്ഞതിനു് 'ഉപ്പു' എന്ന് പേർ വന്നു എന്ന് പറയേണ്ടിയിരിയ്ക്കുന്നതുപോലെ "അൻപ്" ഈശചരലക്ഷണംവരെയായ മഹിതസ്സേഹത്തെ കുറിയ്ക്കുന്നു. പം" ഐഫികതുഷ്ഠിയേയും കുറിയ്ക്കുന്നു. "ഇൻപം" ചിററിൻപം എ ന്ന കണക്കിന്ന് അല്പമാക്കി "പേരിൻപം" (പെരുകിയ സുഖം) തമിഴി "നല്ലപോലെ" എന്നു് അത്ഥമായിത്തീന്ന് 'അൻപു്' മലയാ ളത്തിൽ 'അമ്പ്' എന്ന വേഷത്തിലായിട്ടുണ്ടു്. ശരാത്മാത്തിലുള്ള 'അമ്പു'' സ്വതമേ ഉള്ള വേഷത്തിൽ 'ഉമ്പർ' എന്നതുപോലെ ഇരിയ ക്കുന്നപെങ്കിലും ദേവാശയം ഉപ്പിലില്ലാത്തതുപോലെ ഇതിലുമില്ല. ഫ" എന്ന സംസ്തതാവൃയത്തിൽ "ചുട്ടെഴുത്തു" ഉണ്ടെന്നു് ബിഷപ്പ്, RS

ഡാക്ടർ, റോബട്ട്, കാശഡ്വെൽ തെളിയിച്ചു പറഞ്ഞിട്ടുണ്ടെങ്കിലും "ദ്ദരത്ത്ര പായുന്ന" അമ്പിനെപ്പററിയും അൻപശബ്ദത്തെപ്പററിയും പറയേണ്ടെയ്ക് പറയാത്തയ്യകൊണ്ടും ജാഫെററിൿ (Japhetic) സ്റ്റേജ് (Stage) എന്ന ഘട്ടത്തിൽ ക്രാവിഡഭാഷാവഗ്ഗത്തിനും, സിതിയൻ എന്ന് അദ്രേഹം പരാമർശിയ്ക്കുന്ന വഗ്ഗത്തിനും, സെമിററിൿ എന്ന വഗ്ഗത്തിനും ആയ്യ്വ Indo-European, Indo-Germanic, വഗ്ഗത്തിനും പോ തുവെയുള്ള പൂവ്വസ്ഥിതിയിൽ ഉള്ള വയായി അദ്രേഹം കാണിയ്ക്കുന്ന ദ്രഷ്ടാനത്തുക്കൊണ്ടും, നമുക്ക് അത്ര് ഊഹിയ്ക്കാവുന്നതാണ്. വിശേ ഷിച്ചു് "ഇഹ്" എന്നതിനോട്ട് ഉച്ചാരണസാമ്വമുള്ള പദം അപരിഷ്യത് ക്രാവിഡഭാഷയൊന്നിൽനിന്ന് അദ്രേഹംതന്നെ യറ്റച്ഛയാ കാണിച്ചിട്ടും ഉണ്ട്. ഇങ്ക (ഇങ്ങ്) എന്ന പദവും നോക്കുക. സാധാരണത്തമി ഴിൽ "എ" ചേത്ത്ര് ഉച്ചരിയ്ക്കുമ്പോശമാത്രം മുക്കാലും ഗ്രസ്പമാക്കി "ഇങ്ക്ക്" എന്നാക്കുന്നു എന്നോളള്ള. മലയാളത്തിലോ "പൊൻ കാരം" ഉണ്ടെങ്കിലും "തങ്കം" ഉള്ള തുപോലെ ഓങ്കാരവും, അഹങ്കാരവും ഉണ്ട്.

രാവിഡഭാഷകളിൽ ഓരോന്നിൽ ഓരോവിധമായി "ഉ" കാരവും, വിശേഷിച്ചും അതിന്റെ ദിർഘവും കുറഞ്ഞും, മറഞ്ഞും പോയിരിയ്ക്കുന്നു. ആയ്പ് (Aryan, Ayran) ഭാഷകളിൽ ജാഫററിക്കസ്റ്റേ ജിലെ "ഉത്" എന്ന ഉപസഗ്ഗം ഉൽസഗ്ഗാഭിശബ്ലുങ്ങളിൽ സവ്വോപരിയായി അവശേഷിച്ചു കാഞന്നു. സംസ്ത്രത്തയിൽ ഇഭം ശബ്ബുത്തിന്റെ പല്ലിംഗം അയം എന്നും, സ്ത്രീലിംഗം ഇയം എന്നും, നപുംസകം ഇഭം എന്നും തരംതിരിയ്ക്കുന്നതുകൊണ്ടുതന്നെ "ഇത്, അത്" എന്നരുപങ്ങളുടെ "രുപത്രണം" എത്രത്തോളം മാറിയിട്ടുണ്ടെന്നു കാണാം. കണ്ണാടകത്തിൽ ഇടു എന്നുള്ള ഒരുപരിഷ്തത്രലാവിഡഭാഷയിൽ "ഇഭം" എന്നുള്ള ടത്തോളം ഉച്ചാരണമുള്ള ഇം ഇവിടെ സൂരണീയമാണും. തെലുങ്കിൽ "ഇഭി" എന്നായി സ്ത്രീലിംഗരുപവും അതുതന്നെയായിരിയ്ക്കുന്നതിനെപ്പററി ഇവിടെ കുറിയ്ക്കുക മാത്രമേ ചെയ്യാൻ പ്രസക്തിയുള്ള.

സംസ്തൃതത്തിൽ "അഭസ്" ശബ്ദത്തിന്റെ വിശേഷവിധി കാറം പറകയാണെങ്കിൽ "മറിമായമിതാക്കറിയാം?" എന്ന ഉണ്ണായി വാരിയരുടെ വാക്ക് ഓമ്മവരും. അത്യ, ഇത്യ എന്ന സംസ്തൃതാവ്യയ ഒ്യൂട്ടെ നില നോക്കുക. അഥ എന്ന അവ്യയവുമങ്ങിനെ! യൂറോപ്പിലുള്ള ആയ്യ്ഭാഷാപടങ്ങളിൽ ചോദ്വസവ്വനാമങ്ങളിലും, ചോദ്വസാവ്വനാമിക "ഭേദക്ക്" അളിലും "കിം" ശബ്ദത്തോട്ട് ചേച്ച്യയുള്ള വൃഞ്ജനം മാത്രം കാണമാറായിരിയ്ലെ, സംസ്തൃതത്തിൽ "യഥാ കഥഞ്ചിടപക്ഷ്യും മി"; "യത് കിഞ്ചിടിയംവോ ഒക്ഷിണാ"; "ഏനകേനപ്രകാരേണ" എന്നവയിലെ ശൈലികളും മററും പരിശോധിച്ചാൽ "കണ്ണീരൊഴുക്കുകിച്ചതും മതിയാകയില്ല" "too deep for tears" എന്നു പറയത്ത കാവിധത്തിൽ "അതികോമളതീക്ഷ്ണം" ആണ് ഭാഷാതത്വപ്രകട നവും അതിൽനിന്നുണ്ടാവുന്ന ചരിതാഭിവിളവുകളുമെന്നു പറഞ്ഞു ചുരുക്കാനേ ഇവിടെ സ്ഥലുള്ള. "യൽ", "എത്ര", "ഏത്ര" എന്നിവ യുടെ ബന്ധവും രോമാഞ്ചപ്രഭാതന്നെയല്ലെ?

"എന്നു പറഞ്ഞൊരു സീമയിട്ടീടിനാരം! എന്നതു ചില്ലിയായ്ക്കണ്ടതിപ്പോരം!"

എന്നു് ചെുശ്ശേരി നമ്പുതിരി "അലങ്കാരാസ്ത്രചലങ്കാരാദ" എന്ന തര്പത്തിന്റെ വികസനമായി കാണിച്ചിട്ടുണ്ടല്ലോ. അതിൽ സംസ്തൃത തരിലെ ചില്ലീശബ്ദമാണല്ലോ ഉള്ള തു്. പാരസീകസംസ്തൃതഭാഷക ഉടെ ബന്ധം മനസ്സിലാക്കുകയും ദ്രാവിഡഭാഷകളെല്ലാം അവയ്യും മാത്രം പൊതുവായ ഒരു മാത്രഭാഷയിൽനിന്ന് ഉണ്ടായവയാണെന്നുള്ള അബ ഭാവാഭത്തിൽ ചാടാതിരിയ്ക്കുകയും ചെയ്യുന്നതിലേയ്ക്കുള്ള ദ്രാവിഡ ശബ്ദമായ "ചില്ലി"യായിരിയ്ക്കുട്ടെ, Relative Pronoun എന്നിങ്ങിനേ യും Interrogatives എന്നിങ്ങിനേയും പേരുള്ള വഭങ്ങറാക്ക് സംസ്തൃത ത്തിലുള്ള വ്യവപ്പേടവും, ദ്രാവിഡഭാഷകളിൽ Relative Pronouns എന്തപ്പറയുന്ന വകതന്നെ സ്വയമേ ഇല്ലാതിരിയ്ക്കുന്ന എന്നുള്ള സ്ഥിതിയേയും ചോദ്യസവ്വനാമസാവ്വനാമികങ്ങളുടെ ത്രവങ്ങളിൽ (ഉഭാഹരണം who, whom, whose, which) യുറോപ്പിലെ ആയ്യഭാഷകളിലെ

Relative Pronouns വേഷത്തിൽമാത്രം ലയിച്ചതും പ്രാവിഡമാഷക ളുടെ പ്രാചീനത്തിൽ അതിപ്രാചീനദശാസന്ധിയുടെ ഈ ലേശപ്രകട നവും എന്ന് ആശംസിച്ചു കൊള്ളുന്നു.

അതുവും ഇതുവും എന്നെഴുതുന്നത് തെററാണെന്നു തോന്നാം. അത്, ഇത്, ഉത്, എയ് എന്നിവ "പൊത്" എന്നത്പോലെ "മുററിയൽ" ഉകാരംകൊണ്ട് അവസാനിയ്ക്കുകയാൽ തമിഴ്വ്വാകര ണപ്രകാരം "അതുവും" എന്ന് തുടങ്ങിയ നാലു കൂട്ടത്തിന്നും ധാരാളം സാധ്യത്വമുണ്ട്. അതും ഇതും എന്നിവയാണു് "ഭജനംമുത്ത്യ് ഉൗരാ ബു" എന്ന കണക്കിന് നടപ്പായിവന്നു് അതുവും, ഇതുവും എന്നിവയെ ബഹിഷ്യരിയ്ക്കുന്നത്ല്. മലയാളത്തിൽ "അതുവും ഇതുവും" ഇല്ലാ തായിവന്നുവേന്നുകൂടി പറയാം; വടക്കെ മലബാറിൽ ഇല്ലാതായിത്തി ന്നിട്ടില്ലെന്ന് കൌതുകപൂവ്വം പറയേണ്ടിയിരിയ്ക്കുന്നു. ഇതുവും ഈ രണ്ടും സാധു" എന്ന് വ്യാകരണമോട്യോത്തരത്തിൽ കാണാം.

ധമ്മാത്ഥകാമമോക്ഷശബ്ലങ്ങളെ "അറാപൊരുളിൻപം വീ ട്" എന്നും, വിഭക്തിയെ "വേറുഒമെ" എന്നും തഞ്ജിമചെയ്യാനും അരുണാചലശബ്ലത്തെ "അണ്ണാമല" എന്നീ ഭംഗിനോക്കിയെടുക്കാനും മടിയ്ക്കാത്ത ദ്രാവിഡഭാഷാവഗ്ഗത്തിന്റെ താങ്ങായ മഹാമഹാൻറെ ഷഷ്ട്രൂബ്ലപൂത്തിലിനം (അപ് +ഒം, വഷം) ആണ്ടതോരം ഇനി കൊ ണ്ടാടുമാറാകട്ടെ!

മനോരോഗം

By H. H. RAMA VARMA APPAN THAMPURAN, TRICHUR.

"രാഗാഭിരോഗാൻ സതതാനുഷക്താ-നശേഷകായപ്രസ്വതാനശേഷാൻ, ഔത്സുക്വമോഹാരതിഭാൻ ജഘാന യോടപൂവ്വ്വൈദ്വായ നമോസ്ത തസ്സൈ."

രാഗാളിമാനസികരോഗങ്ങരം അ സവ്വ്വാധാന്വം കല്പിച്ച് ത ദ്രോഗനിവ്വത്തിവിഷയത്തിൽ അനന്വശരണനായി ശരീരാമയങ്ങളുടെ നിഭാനങ്ങരംക്കു നിഭാനമായ മനോരോഗചികിത്സ 'അപൂവ്വ്വൈദ്വു'നാ യ സവ്വേശചരനിൽ സമപ്പിച്ചുകൊണ്ട് ധമ്മാത്ഥസുഖസാധനമാത്ര മായ ശരീരത്തിന്റെ സാധാരണത്തിനം ആയുരാരോഗ്വരക്ഷയ്ക്കുമായി തൻെറ ആയുവ്വേഭോപദേശശ്രപമായ "അഷ്യാംഗവ്വദയം" എന്ന വിശിഷ്ടവൈദ്വഗ്രന്ഥം വാഹടാചായ്പർ ആരംഭിച്ചിരിക്കുന്നു.

പ്രത്യക്ഷലക്ഷണങ്ങളെക്കൊണ്ടു ദേഹത്തിൽ പ്രകടങ്ങളായി കാണാവുന്ന മനോരോഗങ്ങളുടെ ചേഷ്ടാവിധങ്ങളും ഒഭൗതികവും ഒരെ വികവും ആയ ചികിത്സാവിധികളും 'ഉത്തരസ്ഥാനത്തിൽ ബാലഗ്രഹ പ്രതിഷേധം' എന്ന മുന്നാമല്യായംമുതൽ 'അപസ്മാരപ്രതിഷേധം' എ ന്ന ഏഴാമല്യായമുറംപ്പടെ ആറല്യായങ്ങളിൽ സംഗ്രഹിച്ചതല്ലാതെ സൂക്ഷു സൂക്ഷുതരങ്ങളായ മറവു മനോരോഗങ്ങളെ അദ്ദേഹം സ്വശിക്കു ന്നില്ല. ശരീരത്തിനും മനസ്സിനും അന്യോന്യം ബാധ്യബാധകഭാവം പ്രകൃതിസിലാവും അനുഭവഗോചരവും ആയ സ്ഥിതിക്കു് ആരോഗ്യചി നയയിൽ മനസ്സിന്റെ പ്രാധാന്യവും അദ്രേഹം സ്മരിക്കാതിരുന്നില്ലെന്നു

"ഉന്മാഭോ നാമ മനസോ ടോഷൈരുനാർഗഗൈർമദഃ ശാരീരമാനസൈർട്ടപ്പൈ രഹിതാഭന്നപാനതഃ" എന്നു് ഉന്മാഭത്തെ നിർവചിച്ച് അതിനെറ നിഭാനം പറഞ്ഞിരിക്കു ന്നതിൽനിന്നു് ആചായ്യൻെറ ഉദ്ദേശം സ്രഷ്ഠമാകുന്നുണ്ടല്ലോ. ഈ മനസ്സെന്ത്, അതിൻറെ സചരുപമെന്ത്, അതിൻറ പ്രകൃതി വികൃതികഠം എന്ത്, രോഗാരോഗ്യകാരണങ്ങളെന്ത്ര്, രോഗ നിവൃത്തിക്കും ആരോഗ്വലാഭത്തിന്താ ഉള്ള മാഗ്ഗങ്ങളേവ, ഇത്വാദി ചി ന്തകഠം ജീവികഠംക്കെല്ലാം ആദരണീയങ്ങളല്ലാതെ വരുവാൻ തരമില്ല.

ജീവോപാധിയായ ശരീരത്തോടുകൂടി മനസ്സം ആവിർഭവിക്കുന്നു. പഞ്ചകോശാത്മകമായ ശരീരത്തിൽ സ്ഥുലങ്ങളും അന്നപ്രാണ മയങ്ങളുമായ കോശങ്ങരം ഭൌതികവും മനോമയം ടൈവികവും വി ജ്ഞാനാനന്ദമയങ്ങരം അദ്ധ്യാത്മവും ആകന്നു. ആദ്യത്തെ രണ്ടുകോ ശങ്ങരം പ്രഥിപ്പാളിപാഞ്ചഭൌതികവും മുന്നാമത്തേത്ര് ഗന്ധാദിതാനമാത്രികവും വിജ്ഞാനാനന്ദമയകോശങ്ങരം അതിമാത്രങ്ങളും ആകന്തു. അചേതനമായ ഭൌതികം സ്ഥുലവും പ്രത്യക്ഷവും മനസ്സിൻെറെ ഉപാധിയായ താന്മാത്രികം സൂക്ഷ്യവും പരോക്ഷവും ഉദാസീനവും ജീ വോപാധിചേതനവും സ്വതന്ത്രവും പഞ്ചികൃതമായാമയവും പഞ്ചകോ ശാന്തർഗതവും ആകന്നു.

ഇങ്ങിനെ ചേതനാചേതനങ്ങളുടെ മദ്ധ്വവത്തിയായ മനസ്സ് കാലാത്ഥകമ്മങ്ങളുടെ ഹിനമിഥ്വാതിമാത്രായോഗംകൊണ്ട് രോഗഗ്രസ്തമായ ശരീരത്താലം പ്രാരബ്ലവും സഞ്ചിതവുമായ കമ്മങ്ങൾംക്ക് അനുമണമായ വാസനാസം സ്താരങ്ങളാൽ അഭിഭ്രതനായ ജീവനാലും ബാധിക്കപ്പെടുന്നു. ബാധിതമായ മനസ്സ് ദേഹത്തേയും ജീവനേയും പ്രതിബാധിക്കുകയും ചെയ്യുന്നു.

മനസ്സിന്ന് പ്രത്യേകിച്ചൊരു സചര്രപമില്ല. ഇന്ദ്രിയങ്ങളാലും വാസനാസംസ്താരങ്ങളാലും ഏതേതു വിഷയത്തിൽ പ്രേരിപ്പിക്കപ്പെടു ന്നുവോ അതാതിൻെറ സചര്രപാരം വിചാരങ്ങളും വികാരങ്ങളും തന്നെയാകന്നു മനസ്സ്. ശരീരത്തിൽ വാതാലിഭോഷവൈഷമ്യം രോഗവും ഭോഷസാമ്യം അരോഗതയും ആക ന്നതുപോലെ സതചാലിതുണവൈഷമ്യവും തുണസാമ്യവും മനസ്സിൻെറ രോഗാരോഗ്യങ്ങൾം മൂലകാരണങ്ങളാകന്നു. രോഗാരോഗ്യങ്ങൾം തന്നെ ദുംഖസുഖങ്ങൾം.

മനസ്സിൻറെ ത്രൈഇണ്യം ശരീരത്തിൽ തിടോഷംപോലെയും വിഷക്രമിയുടെ വിഷംപോലെയും ജന്മസിദ്ധമാണു്. ത്രൈഇണ്യ ത്തിൻറ മുലസ്ഥഭാവം ജീവപ്രകൃതിക്കന്മസരിച്ചിരിക്കും. വികാരങ്ങൾം വാസനകളാലും കമ്മങ്ങളാലും നിയന്ത്രിക്കപ്പെടുന്നും. ഇപ്രകാരം സത്വ രജസ്തമോഇണങ്ങൾം വികൃതാവികൃതങ്ങളായിട്ട് മനസ്സിന്നു് ദുഃഖത്തേ യോ സുഖത്തേയോ ആരോഗ്യത്തേയോ രോഗത്തേയോ ഉളവാക്കുന്നും.

മനോരോഗങ്ങളിൽ വാസനാജന്വങ്ങൾ നിജങ്ങളും കമ്മജ ങ്ങൾ ആഗന്തുകങ്ങളും ആണെന്നു പറയാം. നിജം യാപ്വവും കുച്മ്രേ സാജ്യവും ആഗന്തുകം ചികത്സകൊണ്ടു മാററാവുന്നതും മാറിക്കൊ ണ്ടിരിക്കുന്നതും ആകുന്നു.

മനസ്സിൻറെ രോഗങ്ങൾ രാഗാദികളാണെന്നു പറഞ്ഞുവല്ലോ. മമതാഹങ്കാരാദികളെക്കൊണ്ടു ത്രൈഇണ്യസ്പഭാവത്തിന്നു വരുന്ന വി കാരമാണ് രോഗനിഭാനം; സംഗമാകുന്നു പ്രാഗ്രുപം; കാമക്രോധാ ഭിഷഡ്വഗ്ഗം ലക്ഷണവും യമശമാദികൾ ഉപചയവും സമ്മോഹാദി പ്രണാശാന്തം ആപ്ലിയും ആകുന്നു.

> "സംഗാൽ സഞ്ജായതേ കാമ ദ കാമാൽ ക്രോധോഭിജായതെ ക്രോധാൽ ഭവതി സമ്മോഹ ദ സമ്മോഹാൽ സ്ത്രതിവിഭ്രമ ദ സ്ത്രതിഭാശാൽ ബുദ്ധിനാശ ദ ബുദ്ധിനാശാൽ പ്രണശ്വതി."

(ഗൂയ)

നിജാഗന്തുവിഭാഗേന തത്ര രോഗാ ദചിധാ സ്തൃതാ ഭ തേഷാം കായമനോരുഭാ-ദധിഷ്യാനമപി ദചിധാ രജസ്തമശ്ച മനസോ ദെചൗച ഭോഷാവുദാഹൃതൌ.

എന്നാണു് വാഹടാചായ്പ്റർ പറയുന്നതു്. ഇവിടെ രജസ്തമസ്സുകളെ മാത്രമേ മനോഭോഷങ്ങളായി ആചായ്പർ ഗണിക്കുന്നുള്ള. എന്നാൽ, സുകൃതദുവ്യുതങ്ങൾ രണ്ടും ജന്മത്തിന കാരണമാകകൊണ്ടും ഭവരോഗ ത്തിൻെറ മുലച്ഛേദംകൊണ്ടല്ലാതെ ജന്മനാശം സംഭവിക്കാത്തത കൊണ്ടും മുക്തിവയ്യന്തം മനോരോഗത്തിന്ത പരമശാന്തിവരാത്തയ്യ കൊണ്ടും മനോരോഗചികിത്സയുടെ പരമാവധി മനസ്സിൻെറ നാശം തന്നെ ആയതുകൊണ്ടും സത്വതുണത്തെക്രൂടി ആദ്യ്യാത്മികദ്രഷ്ട്ട്യാ കാരണമായി ഗണിക്കേണ്ടിയിരിക്കുന്നു. എന്നാൽ ശരിരചികിത്സയിൽ ഭേഹാവായമല്ല ദേഹസംരക്ഷണമാണ് ഇഷ്ടവും സാദ്ധ്യവും. അതു കൊണ്ടു മനസ്സിനെ ശരീരത്തിൻെറ ആരോഗ്യത്തിന്ന സഹകാരിയായി വിചാരിക്കുമ്പോറം സത്വത്തെ ഭോഷകോടിയിൽനിന്ന് നീക്കുചെയ്യുക തന്നെവേണം. അത്രത്തോളമെ ആചായ്യൻെറ ഉദ്ദേശമുള്ള വെന്നും കുരുത്തം.

രോഗാഃ സവ്പേപി ജായന്തേ വേഗോദീരണധാരണൈഃ

എന്ന വാക്വത്തിലുള്ള 'വേഗ'ശബ്ദത്തിൽ മനോരോഗത്തെ സംബന്ധി ച്ചിടത്തോളം ഭയക്രോധാദി ആവേഗങ്ങളം ഉശപ്പെടുന്നതാണു്. വെ രതെ വ്വസനിക്കുക, ദുഃഖം അടക്കുക, സത്വം മറയ്ക്കുക, വ്വാജം പറയുക മുതലായവ ആവേഗങ്ങളുടെ ഉദീരണധാരങ്ങളാകുന്നു.

ധീധൈയ്യാത്മാടിവിജ്ഞാനം മനോദോഷൌഷധം പരം

എന്നാണ് മനോരോഗത്തിന്ന് അഷ്ടാംഗാറ്റുടയപ്രകാരമുള്ള സാമാന്യ ചികിത്സ. എന്നാൽ സകല ധാമശാസ്ത്രങ്ങളിലും കമ്മവിധികളിലും യോഗശാസ്ത്രങ്ങളിലും അദ്ധ്വാത്മഗ്രന്ഥങ്ങളിലും മനോടോഷൌഷധങ്ങ ളെ തെന്നെയാണ് പരാമശിക്കുന്നത്ല്. മനോരോഗനിവൃത്തിതന്നെ യാണ് ലക്ഷ്വം. ആ ചികിത്സയെ പോഷിപ്പിക്കുവാനം പ്രചാരത്തിൽ വരുത്തുവാനമാണ് നമ്മുടെ ഋഷീശചരന്മാരും യതിശചരന്മാരും യത്നി

മനോരോഗചികിത്സാവിധിയിൽ ഭിനചയ്യ പ്രധാനമായ ഒരു ശമാകുന്നു. മനശ്ശുദ്ധിക്കു വേണ്ടതായ കർമ്മങ്ങാം ചെയ്യണം. ഈ കർമ്മകാണ്ഡം ദ്രവൃയജ്ഞാഭിപഞ്ചയജ്ഞപ്രകരണവിവരണത്തിൽ അടങ്ങിയിരിക്കുന്നു. സാത്മ്വമായ ആഹാരം ത്രൈതുപ്പാക്കതിക്ക് അനുസരിച്ച് മൂന്നു വിധത്തിൽ വിഭജിക്കപ്പെട്ടിരിക്കുന്നു.

അവരവരുടെ സ്വഭാവത്തിന്നു അനസരിച്ച ആഹാരം ഏതെ ന്നറിയുവാൻ സ്വസ്വഭാവത്തേയും അറിയണമല്ലോ. 'തത്ര സത്ത്വം നിർമ്മലത്വാൽ പ്രകാശകമനാമയം സുഖസംഗേന ബധ്നാതി.......', 'രജോ രാഗാത് മകം വിദ്ധി തൃണ്ണാസംഗസമുൽഭവം.......', 'തമസ്ത്വ ജ്ഞാനജം വിദ്ധി മോഹനം........' ഇത്വാഭി വചനസഹസ്രജ്ജമേക്കോ ണ്ടു് ഇണങ്ങളുടെ സ്വര്യവചേഷ്ട്രകളെ അറിവാൻ സാധിക്കാവുന്ന താണു്.

മനോരോഗചികിത്സയിലും ഔഷധങ്ങൾം ശമനമെന്നും ശോധനമെന്നും രണ്ടു പ്രകാരത്തിലുണ്ടു്. തമസ്സിനെ അദ്ധ്വയനാഭിശോധ കങ്ങളായ ഔഷധങ്ങളെക്കൊണ്ടിളക്കി ക്കളത്തു രജസ്സിനെ നിഷ്ടാമ കർമ്മങ്ങളിൽ ദവിപ്പിച്ചു യോഗംകൊണ്ടു സത്വശോധന വരുത്തി തി ഇണങ്ങളേയും ആത് മവിജ്ഞാനംകൊണ്ടു് ശമിപ്പിക്കകയാണു് മനോ രോഗൌഷധങ്ങളുടെ വിത്വപരിപാകഫലവും മനശ്ചികിത്സയുടെ പര മപ്രയോജനവും.

മനസ്സിന മുഡം, ഘോരം, ശാന്തം, എന്ന മുന്ന വൃത്തികളുണ്ട്. ആർദ്രേന്ധനത്തിലെ ജലാംശം സൂയ്യരശ്ശികൊണ്ടോ അഗ്നിസംപക്കം കൊണ്ടോ ആവിയാക്കിക്കളഞ്ഞു് ശുരുപ്പമാക്കി അഗ്നിയിൽ ആഹുതി ചെയ്യ ഭഹിപ്പിച്ചു വെണ്ണീറാക്കിത്തുള്ള ന്നതുപോലെ മനസ്സിൻറ മുഡം വൃത്തി വിഭ്യകൊണ്ടു കളഞ്ഞു് ഘോരവൃത്തി നിഷ്ടാമകർമ്മാകൊണ്ടു ശമിപ്പിച്ചു രണ്ടാ ശാന്തവൃത്തിച്ചിൽ പത്വവസിപ്പിച്ചു് അതു പരമാത് മാവിൽ സമപ്പിച്ചാൽ മനസ്സ് സ്വസ്ഥമായി; സംസാരമാകുന്ന മാച്ചാ മയത്തിൽനിന്ന നിത്വമക്കവുമായി. ഈ പരമാനന്ദപ്രാപ്തിക്കുള്ള ചികിത്സയാണ് യമനിയമാദി അഷ്ടാംഗയോഗാ; അതിനുള്ള സിഒലൗ ഷധങ്ങളാണ് കർമ്മയോഗവും ജ്ഞാനയോഗവും ഭക്തിയോഗവും.

ഓം ശാന്തി ശാന്തി ശാന്തി ഭ

momassas! By VALLATHOL

(കാകളി)

ഉച്ചരിതാത്ഥത കണ്ണിന കിട്ടമാ-ര'ച്ചമലരി'തൻ പുഷ്പം പ്രവുല്ലമായ്; അച്ഛുന്നശോഭം നഭസ്സിൻ നടുക്കിലായ്, സചച്ഛനാം ശാരദരാകാസുധാകരൻ: സചണ്ണാചലംപോലഖണ്ഡവിഭ്രതിയാ-മണ്ണാമലയെന്ന ചെട്ടിരാജാവിതാ, മാനുഷായുസ്സിൻെറ മധ്യമണഞ്ഞു നി-ന്നാ,നന്ദുതുന്ദിലരാക്കുന്ന ലോക്കര. വെവ്വേറെ ചൊല്ലുന്ന മംഗളം ഭാഷകരം; നിവ്വവിയും ന്നു നവോത്സവ മുരുകരം; നിർവ്വാജമോഭത്തിലാണ്ടു വിശേഷണ നിർവ്വതിക്കൊഠാവു തമിഴുനാടൊക്കെയും.

പാടെ തെളിയട്ടെ പേത്തും തടാകങ്ങൾം പാടിപ്പറക്കട്ടെ നെല്ലംതിർ ത്തത്തകൾ; കാറിൻകറപ്പ് കളഞ്ഞു വിമലമായ്-ത്തീരട്ടെ നമ്മർംതന്നാബരമണ്ഡലം: വൃഷ്യദ്രവിണയാം ദ്രാവിഡരാജന്റെറ ഷഷ്ട്വബ്ലപ്പത്തിതൻ പഷ്ടയശസ്സിതാ, പാറിപ്പരക്കുന്ന കേരളഭ്രവിലും, കെരവാംഭോജ സുഗന്ധിയാംകാററിനാൽ. പേ തമിർംനാടേ, ഭവത്സാചുദാചങ്ങൾം വീതിച്ചെടുക്കുന്ന തോഴിയല്ലോ ചിരാൽ, ഭിന്നത കാഴ്ചയിൽ ത്തോന്നിയ്യും മെങ്കിലും, നിന്നയൽക്കാരിയാം ജാമഭഗ്വേക്ഷിതി. കൺമിഴിയ്ക്കാറില്ല ലോകോപകാരക-കമ്മങ്ങളിൽ, മിക്ക വമ്പണപ്പെട്ടിയും; അത്ഥവൃവസായപണ്ഡിതനങ്ങന്നു ബുദ്ധിവെച്ചാജ്ജിച്ച ഭൂരിധനങ്ങളോ, എത്ര യുവാക്കഠക്കു നല്ലിവരുന്നതി-ല്ല,ത്തംഗ വിഭ്വാധനത്തെ ഭുയാനിധേ? ക്ഷേത്രങ്ങഠം, വിഭ്വാലയങ്ങഠം, വിശുഭ്യങ്ങഠം തീത്ഥാടനക്കാക്കു വിശ്രാന്തിമേടകരം; മൂദ്ധാവുയത്തിനില്പീലിവയെങ്ങെങ്ങു മൃത്തങ്ങളാം ഭവൽക്കീത്തിപുഞ്ജങ്ങളായ്?

കല്വാരാം തചദ് ഭൃത്വരെണ്ണിനോക്കുന്ന പൊൻ-വെള്ളിപ്പണങ്ങൾ തൻ നിസ്ഥനമല്ലയോ-തചദ് ഭവനത്തിലുലാത്തുന്ന ലക്ഷ്മിതൻ തുപ്പാദമഞ്ജിരശിഞ്ജിതമല്ലയോ-ഗാനമായ് നിഗ്ഗളിയ്ക്കുന്നു, ചിദംബര-സ്ഥാനേ ഭവാൻ തീത്ത ഗീതവിദ്വാലയേ! ആ മഹാപാഠാലയത്തിൽ നിന്നോലുന്ന കോമള വേണുവീണാഭിഗാനങ്ങളിൽ കേർക്കപ്പെടുന്നതു, തൽപ്രണേതാവിൻെറ വായ്ക്കും കലാപ്രേമമല്ലോ ഭിനേ ഭിനേ! ത്രേഷ്യർ പഠിപ്പിയ്ക്കുമിഗ്ഗീതവാഭ്വാഭി കേട്ടിട്ട,തിനൊത്തു നൃത്തം മുതിക്കുവാൻ തുക്കഴൽപൊക്കി നിലക്കൊർംവു സർവഭാം, ത്വൽക്കലുടെവതമായ നടേശചരൻ!

രാജരേഖാംകിതമൌലിയാം ശ്രീനട-രാജന്ത, ഭക്തൌഘരാജരാജൻ ഭവാൻ രാജതരാശിയാൽ ക്കാഴ്ചവെച്ചീലയോ, രാജമാനമൊരു കൈലാസപവ്വതം! വിഭ്യാലയാതോറു മമ്പലംതോറുമേ കത്തിച്ചു ഭീപങ്ങഠം, തേജസചിയാം കോൻ; തചൽപ്രഭാവത്തിലോരോരോ ബിരുടമാം സപ്രഭീപത്തെക്കൊളുത്തി മേൽക്കോയ്മയും. താങ്കഠംതന്നാജന്മരഞ്ജനശൈലിതാൻ താങ്കളെ ചൂടിച്ച 'രാജ'ശബ്ബമിതോ, തചൽപ്പുത്രപൌത്രാഭികഠംക്കു മെന്നെന്നെയ്യും-മൊപ്പം ധരിയ്ക്കാവു മല് ജതരത്നമായ്!

ഹാ, തവ ജീവിത മൌഭായ്പ്രഭീപിതം, പ്രീതമാം വിഭപജ്ജനത്താൽ നിശ്രപിതം; നൃത്തമാടട്ടെയീ മേച്ചമാം രംഗത്തിൽ നിത്വം, നടേശന്റെറ കാരുണ്വധോരണി!